

## EAST Search History

Ref. #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L22	16	11 AND ((scalable OR flexible Or adjustable Or modifiable OR changeable OR variable) AND (capacity OR ability OR capability\$3) AND (switch OR router))	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/11 16:47
L21	0	11 AND ((scalable OR flexible Or adjustable Or modifiable OR changeable OR variable) NEAR2 (capacity OR ability OR capability\$3) AND (switch OR router))	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/11 16:46
L14	0	11 AND (scalable NEAR2 capacity NEAR3 (switch OR router))	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/11 16:44
L16	7	11 AND ((data OR packet OR inforamtion) NEAR3 flow)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/11 16:43
S317	32	scalable NEAR2 capacity NEAR3 (switch OR router)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/11 16:37
S138	26	independent\$4 scale\$3 (switch\$3 OR rout\$4 OR control\$4) (server OR network)	USPAT	WITH	ON	2007/09/11 16:36
L13	34	11 AND ((switch\$3 OR rout\$4 OR control\$4) (server OR network))	USPAT	WITH	ON	2007/09/11 16:36
L12	0	11 AND (independent\$4 scale\$3 (switch\$3 OR rout\$4 OR control\$4) (server OR network))	USPAT	WITH	ON	2007/09/11 16:36
L11	37	9 AND @ad<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/11 16:35
S60	692	(handl\$3 OR manag\$3) NEAR2 (new NEAR2 ((data NEAR flow)OR flow OR request OR connection))	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/11 16:34

## EAST Search History

S22	71	S21 AND ad@<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/11 16:34
L9	170	(handl\$3 OR manag\$3) NEAR2 (new NEAR2 ((data NEAR flow)OR flow OR request OR connection)) AND 8	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/11 16:34
L8	20659	((709/225-227,238,242) or (370/217-220,235, 236,392)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB	OR	OFF	2007/09/11 16:33
S381	1	S365 AND (flow WITH time\$2out)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/07 15:47
S380	1	S365 AND (fault NEAR3 tolerance)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/07 14:11
S379	1	S365 AND scal\$4	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/07 14:00
S376	1	S374 AND fail\$4	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/07 13:56
S374	1	S373 AND delet\$4 WITH flow WITH time\$4	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/07 13:02
S373	1	S372 AND active AND recent	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/07 12:57

## EAST Search History

S372	1	S365 AND (updat\$4 OR modif\$4) WITH table	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/07 12:55
S371	1	S365 AND table	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/07 12:53
S365	2	("20010037387").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB	OR	OFF	2007/09/07 12:49
S33	434	((server NEAR array NEAR controller) OR (traffic NEAR management) OR (Internet NEAR2 traffic NEAR management) OR controller ) SAME ((flow OR transmission) NEAR3 (control OR management OR control)) SAME flow NEAR3 component	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/07 12:49
S364	3	((server NEAR array NEAR controller) OR (traffic NEAR management) OR (Internet NEAR2 traffic NEAR management) OR controller ) AND ((flow OR transmission) NEAR3 (control OR management OR control)) SAME flow NEAR3 component ) AND (client AND server)).CLM.	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:44
S363	0	((handl\$3 OR manag\$3) NEAR2 (new NEAR2 ((data NEAR flow)OR flow OR request OR connection)) control\$3).CLM. AND (independent\$4 scale\$3 (switch\$3 OR rout\$4 OR control\$4) (server OR network) ).CLM.	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	AND	ON	2007/09/05 20:43
S361	35	((handl\$3 OR manag\$3) NEAR2 (new NEAR2 ((data NEAR flow)OR flow OR request OR connection)) control\$3).CLM.	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	AND	ON	2007/09/05 20:43
S193	74	((server NEAR array NEAR controller) OR (traffic NEAR management) OR (Internet NEAR2 traffic NEAR management) OR controller ) SAME ((flow OR transmission) NEAR3 (control OR management OR control)) SAME flow NEAR3 component ) AND (client AND server)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:43
S362	103	(independent\$4 scale\$3 (switch\$3 OR rout\$4 OR control\$4) (server OR network) ).CLM.	USPAT	AND	ON	2007/09/05 20:42

## EAST Search History

S360	15	((handl\$3 OR manag\$3) NEAR2 (new NEAR2 ((data NEAR flow)OR flow OR request OR connection)) control\$3).CLM.	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:42
S311	32	independent\$4 scale\$3 (switch\$3 OR rout\$4 OR control\$4) (server OR network)	USPAT	WITH	ON	2007/09/05 20:42
S243	1171	(handl\$3 OR manag\$3) NEAR2 (new NEAR2 ((data NEAR flow)OR flow OR request OR connection))	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:41
S359	9	(packet NEAR2 flow) AND S356	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:36
S358	1	scalabl\$4 capacity AND S356	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:36
S357	1	independent\$3 scalabl\$4 capacity AND S356	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:36
S356	34	(F5 AND Network).AS.	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:35
S354	7	(GILDE NEAR2 ROBERT).in.	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:35
S324	36	independent\$3 scalabl\$4 capacity	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:35

## EAST Search History

S355	1	(HARMS NEAR2 STEVEN NEAR2 LEE ).in.	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:32
S353	16	packet NEAR3 fragment NEAR4 session	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S352	2	packet NEAR3 fragment NEAR4 session NEAR3 ID	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S351	2037	packet NEAR3 fragment	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S350	64	S347 AND @ad<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S349	8	S348 AND @ad<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S348	18	S347 SAME (switch\$4 OR rout\$5)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16
S347	158	(flow WITH dispatch WITH (communication OR channel))	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16
S346	1	S345 AND (flow ADJ3 state)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16

## EAST Search History

S345	2	("20010037387").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB	OR	OFF	2007/09/05 20:16
S344	14	(US-6396833-\$ or US-6888836-\$ or US-6006264-\$ or US-6253230-\$ or US-6779039-\$ or US-6182139-\$ or US-6327622-\$ or US-6263368-\$ or US-5951694-\$ or US-6781986-\$ or US-5802052-\$ or US-6868082-\$ or US-6876629-\$ or US-5892932-\$).did.	USPAT	OR	ON	2007/09/05 20:16
S343	10	(dynamic\$3 OR independent\$3) (scal\$3 OR adjust\$4 OR optimiz\$3 OR siz\$3) (capacity OR ability OR capability) (switch OR (flow NEAR2 (control\$4 OR manager OR agent OR allocate\$3))) handle packet	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S342	23	(dynamic\$3 OR independent\$3) (scal\$3 OR adjust\$4 OR optimiz\$3 OR siz\$3) (capacity OR ability OR capability) (switch OR (flow NEAR2 (control\$4 OR manager OR agent OR allocate\$3))) handle (packet OR Request)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S341	15	(dynamic\$3 OR independent\$3) (scal\$3 OR adjust\$4 OR optimiz\$3 OR siz\$3) (capacity OR ability OR capability) (switch OR (flow NEAR2 (control\$4 OR manager OR agent OR allocate\$3))) AND packet	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:16
S340	4	S339 SAME packet	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:16
S339	98	(dynamic\$3 OR independent\$3) (scal\$3 OR adjust\$4 OR optimiz\$3 OR siz\$3) (capacity OR ability OR capability) (switch OR (flow NEAR2 (control\$4 OR manager OR agent OR allocate\$3)))	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:16
S338	1	independently scal\$5 capacity	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	ADJ	ON	2007/09/05 20:16

## EAST Search History

S337	2	independently NEAR3 scalable NEAR2 (capacity OR capablity OR process\$3) NEAR2 (switch OR flow)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16
S336	48	scalable NEAR2 (capacity OR capablity OR process\$3) NEAR2 (switch OR flow)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16
S335	13	S334 SAME (switch\$3 OR (flow ADJ control\$3))	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16
S334	76	scalable ADJ capacity	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16
S333	14	scalable NEAR2 capacity NEAR2 (switch OR flow)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16
S332	8	scalable capacity (switch OR flow)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	NEAR	ON	2007/09/05 20:16
S331	9	S330 AND @ad<"19990701"	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16
S330	30	S329 SAME packet	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:16
S329	96	capacity switch data flow	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:16

## EAST Search History

S328	1	(independent\$3 (scalabl\$4 OR adjust\$3 OR control\$4) capacity (switch OR router)).ti.	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:16
S327	12	("4471456"   "5008878"   "5305317"   "5586263"   "5706278"   "5724348"   "5787430"   "5857087"   "6061754"   "6259699"   "6260073"   "6404975").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/05 20:16
S326	3	independent\$3 NEAR2 (scalabl\$4 OR adjust\$3 OR control\$4) NEAR2 capacity NEAR2 (switch OR router)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16
S325	70	independent\$3 (scalabl\$4 OR adjust\$3 OR control\$4) capacity (switch OR router)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:16
S323	2	independent\$3 scalabl\$4 capacity	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	NEAR	ON	2007/09/05 20:16
S322	2	independent\$3 scalable capacity	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	NEAR	ON	2007/09/05 20:16
S321	3	independent\$3 scalable capacity (switch OR router)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:16
S320	108	("5802052").URPN.	USPAT	OR	ON	2007/09/05 20:16
S319	16	("4617657"   "5241536"   "5245616"   "5425025"   "5519690"   "5802052"   "5832287"   "5892894"   "5905727"   "5923662"   "5933435"   "6067300"   "6157643"   "6188686"   "6219728"   "6480492").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/05 20:16
S318	3	("6781986").URPN.	USPAT	OR	ON	2007/09/05 20:16



## EAST Search History

S316	2	("20010037387").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB	OR	OFF	2007/09/05 20:16
S315	23	S314 network	USPAT	SAME	ON	2007/09/05 20:16
S314	114	allocat\$4 (switch\$3 OR rout\$4 OR Load\$2balancer) as need\$2	USPAT	WITH	ON	2007/09/05 20:16
S313	26	S312 WITH (switch\$3 OR rout\$4 OR control\$4)	USPAT	OR	ON	2007/09/05 20:16
S312	339	independent\$4 scale\$3	USPAT	ADJ	ON	2007/09/05 20:16
S310	3	independent\$4 scale\$3 (switch\$3 OR rout\$4 OR control\$4) (server OR network) (traffic OR flow OR load)	USPAT	WITH	ON	2007/09/05 20:16
S309	3	S306 AND flow AND (direct\$4 OR forward\$3 OR switch\$3 OR rout\$4) AND (TCP AND UDP) AND (server OR network) AND table AND buffer AND time\$5	USPAT	OR	ON	2007/09/05 20:16
S308	3	S306 AND flow AND (direct\$4 OR forward\$3 OR switch\$3 OR rout\$4) AND (TCP AND UDP) AND (server OR network) AND table AND buffer	USPAT	OR	ON	2007/09/05 20:16
S307	6	S306 AND flow AND (direct\$4 OR forward\$3 OR switch\$3 OR rout\$4) AND (TCP AND UDP) AND (server OR network)	USPAT	OR	ON	2007/09/05 20:16
S306	10	S304 S305	USPAT	OR	ON	2007/09/05 20:16
S305	1	("6876654").PN.	USPAT	OR	OFF	2007/09/05 20:16
S304	9	(US-6396833-\$ or US-6888836-\$ or US-6006264-\$ or US-6253230-\$ or US-6779039-\$ or US-6182139-\$ or US-6327622-\$ or US-6263368-\$ or US-5951694-\$).did.	USPAT	OR	ON	2007/09/05 20:16
S303	15	S301 AND S302	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16
S302	18049559	@ad<"19990701"	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16
S301	156	switch\$3 NEAR3 ((cluster OR farm) NEAR server)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	OR	ON	2007/09/05 20:16

## EAST Search History

S300	8	((("6396833") or ("6178457") or ("6098093") or ("6779017")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB	OR	OFF	2007/09/05 20:16
S299	869	S298 SAME (direct OR redirect)	US-PGPUB; USPAT; USOCR	WITH	ON	2007/09/05 20:16
S298	10302	S297 SAME switch\$3	US-PGPUB; USPAT; USOCR	WITH	ON	2007/09/05 20:16
S297	95953	data NEAR2 flow	US-PGPUB; USPAT; USOCR	WITH	ON	2007/09/05 20:16
S296	39	("20010056459"   "5384770"   "5416771"   "5473607"   "5651002"   "5774660"   "5787253"   "5805801"   "5844901"   "5845091"   "5903558"   "5951694"   "6006264"   "6021263"   "6041039"   "6044401"   "6128642"   "6128657"   "6137777"   "6182139"   "6185214"   "6185619"   "6233243"   "6249801"   "6263368"   "6266700"   "6272550"   "6295527"   "6304914"   "6327622"   "6330602"   "6341129"   "6370520"   "6389468"   "6415329"   "6421321"   "6421734"   "6446122"   "6480471").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/05 20:16
S295	78	("5283897"   "5301226"   "5473599"   "5513314"   "5583940"   "5586121"   "5608447"   "5612865"   "5612897"   "5634125"   "5652892"   "5655140"   "5666487"   "5687369"   "5740375"   "5754752"   "5764895"   "5774660"   "5774668"   "5796941"   "5805804"   "5812819"   "5815668"   "5828833"   "5835696"   "5835710"   "5862338"   "5864666"   "5898830"   "5920699"   "5936936"   "5949753"   "5951634"   "5959990"   "5963540"   "5999536"   "6006259"   "6006264"   "6047319"   "6078957"   "6097882"   "6098093"   "6101616"   "6108300"   "6141755"   "6226684"   "6266335"   "6295276"   "6356985"   "6389448"   "6397260"   "6484261"   "6530032"   "6606708"   "6647400").PN. OR ("6779039").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/05 20:16
S294	2	identify\$3 flow client server (farm OR cluster)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:16

## EAST Search History

S293	18	identify\$3 flow client server (farm OR cluster)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S292	68	S291 AND @ad<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S291	384	client server (session OR state\$1full) flow	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	WITH	ON	2007/09/05 20:16
S290	15	S288 AND S289	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/05 20:16
S289	2891583	@ad<"19990702"	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/05 20:16
S288	217	(flow NEAR2 (id OR identif\$4)) WITH server	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/05 20:16
S287	39	("20010056459"   "5384770"   "5416771"   "5473607"   "5651002"   "5774660"   "5787253"   "5805801"   "5844901"   "5845091"   "5903558"   "5951694"   "6006264"   "6021263"   "6041039"   "6044401"   "6128642"   "6128657"   "6137777"   "6182139"   "6185214"   "6185619"   "6233243"   "6249801"   "6263368"   "6266700"   "6272550"   "6295527"   "6304914"   "6327622"   "6330602"   "6341129"   "6370520"   "6389468"   "6415329"   "6421321"   "6421734"   "6446122"   "6480471").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/05 20:16
S286	4	((("6128279") or ("6691165"))).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB	OR	OFF	2007/09/05 20:16
S285	2	("6650641").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB	OR	OFF	2007/09/05 20:16

## EAST Search History

S284	12	time\$1stamp SAME (packet OR (data ADj flow) OR flow OR (packet ADJ flow))SAME (load NEAR3 balanc\$3)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S283	12	S282 AND TCP AND UDP	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S282	31	S281 AND (flow NEAR number)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S281	39	S280 AND @ad<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S280	75	flow NEAR (number OR serial)AND (message WITH type WITH header)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S279	12326	flow NEAR (number OR serial)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S278	10	S277 AND @ad<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S277	76	(state OR status)WITH message WITH (TCP OR UDP)WITH session	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S276	7	S275 SAME state	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16

## EAST Search History

S275	46	SSMB	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S274	10	S273 AND @ad<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S273	20	state WITH shar\$3 WITH message WITH bus	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S272	7	S271 AND (flow WITH data WITH packet)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S271	117	S269 AND load NEAR3 balanc\$3	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S270	26	S269 AND re\$1directing	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S269	459	S266 AND @ad<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S268	46	SSMB	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S267	23	S266 SAME packet SAME flow	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16

## EAST Search History

S266	2894	(cluster OR array OR farm)WITH server WITH control\$4	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S265	46	time\$1stamp SAME packet SAME flow SAME (source AND destination)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S264	15	time\$1stamp SAME packet SAME flow SAME (source AND destination) AND signature	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S263	3	time\$1stamp SAME packet SAME flow SAME (source AND destination) SAME mark	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S262	19026	time\$1stamp	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S261	2	S259 AND (router OR switch) AND re\$1direct\$3 AND flow AND packet AND request	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S260	8	S259 AND (flow WITH control)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S259	30	S257 or S258	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S258	1	("5521591").PN.	USPAT	OR	OFF	2007/09/05 20:16

## EAST Search History

S257	29	((("3,950,735") or ("4,644,532") or ("4,965,772") or ("5,023,826") or ("5,053,953") or ("5,299,312") or ("5,327,529") or ("5,367,635") or ("5,371,852") or ("5,406,502") or ("5,475,857") or ("5,517,617") or ("5,519,694") or ("5,519,778") or ("5,521,591") or ("5,528,701") or ("5,581,764") or ("5,596,742") or ("5,606,665") or ("5,611,049") or ("5,663,018") or ("5,752,023") or ("5,761,484") or ("5,768,423") or ("5,774,660") or ("5,790,554") or ("5,875,296") or ("5,892,914") or ("5,919,247") or ("5,936,939")).PN.	USPAT	OR	OFF	2007/09/05 20:16
S256	3	S255 SAME (new WITH flow)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S255	308	S254 SAME control SAME flow	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S254	13058	server NEAR3 controller	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S253	2	S252 SAME control SAME flow	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S252	37	server NEAR array NEAR controller	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S251	6	S249 AND S250	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S250	59957	(control WITH segment)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16

## EAST Search History

S249	147	S248 AND @ad<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S248	383	S242 AND S246	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S247	5	S244 AND S246	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S246	9154	(370/389,392).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB	OR	OFF	2007/09/05 20:16
S245	11	S244 AND @ad<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S244	66	S242 AND S243	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S242	5204	S240 AND S241	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S241	645710	(rout\$3 OR switch\$3 OR direct\$3 OR re\$1direct\$3)NEAR4 (flow OR (data NEAR2 flow)OR (packet OR (packet NEAR flow)OR (communication NEAR3 request)))	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16



## EAST Search History

S240	13880	((709/225,227,232,238,242,244,245) or (718/105)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB	OR	OFF	2007/09/05 20:16
S239	24	netScaler.as. OR f5.as. AND flow NEAR control\$4	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S238	346636	flow NEAR control\$4	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S237	53	netScaler.as. OR f5.as.	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S236	9	S235 AND (direct\$3 OR re\$1direct\$3)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S235	10	S234 AND @ad<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S234	12	S232 SAME S233	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S233	27570	(data NEAR flow NEAR segment) OR DFS	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S232	6213	(control NEAR segment)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16

## EAST Search History

S231	11	S230 AND @ad<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S230	41	S229 SAME (switch OR router)	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S229	230	S228 SAME controller	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S228	2620	(direct\$3 OR re\$1direct\$3) WITH packet WITH flow	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S227	195	handl\$3 NEAR4 new NEAR3 (packet OR (new ADJ3 packet ADJ3 flow))	US-PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TDB	SAME	ON	2007/09/05 20:16
S226	30	S225 AND controller	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S225	63	S224 AND (re\$1direct\$3 OR direct\$3)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S224	72	S223 AND S200	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S223	60951	routr\$3.ti.	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16

## EAST Search History

S222	14	S221 AND (control NEAR2 segment)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S221	367	S220 SAME ((client OR source OR sender OR requester) AND (server OR provider OR destination))	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S220	3313	(Rout\$3 OR switch\$3)SAME (direct\$3 OR re\$1direct\$3)SAME(data NEAR flow)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S219	8	S218 AND (switch NEAR3 component)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S218	57	S217 AND (request)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S217	61	S216 AND (client AND server)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S216	107	S215 AND ad@<"20000321"	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S215	107	S214 AND (data NEAR2 flow OR flow)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S214	134	S213 AND ((component OR device)NEAR2 controller)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S213	2414	S212 AND (re\$1direct\$3 OR direct\$3)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16

## EAST Search History

S212	2758	S211 AND S210	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S211	6013	(709/236,238,244,245).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWEN T	OR	OFF	2007/09/05 20:16
S210	5320	router AND S209	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S209	16530	(709/203,231,232,236,237,238,240244,245). CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWEN T	OR	OFF	2007/09/05 20:16
S208	21	S206 SAME controller	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S207	995	S200 SAME controller	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S206	203	redirect\$3 WITH (data NEAR flow)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S205	8	S203 AND redirect\$3	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S204	2	S203 SAME redirect\$3	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S203	98	S202 SAME controller	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16

## EAST Search History

S202	821	data NEAR2 flow NEAR2 request	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S201	2	DFS AND (data ADJ flow ADJ segment)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S200	27419	DFS OR (data ADJ flow ADJ segment)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S199	14	(server NEAR array NEAR controller) AND flow AND switch\$3	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S198	37	server NEAR array NEAR controller	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S197	42	((server NEAR array NEAR controller) OR (traffic NEAR management) OR (Internet NEAR2 traffic NEAR management) OR controller ) SAME ((flow OR transmission) NEAR3 (control OR management OR control)) SAME flow NEAR3 component ) AND (router OR gateway)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S196	1	(((((server NEAR array NEAR controller) OR (traffic NEAR management) OR (Internet NEAR2 traffic NEAR management) OR controller ) SAME ((flow OR transmission) NEAR3 (control OR management OR control)) SAME flow NEAR3 component ) AND (client AND server)) AND (redirect\$3 OR direct\$3)) AND (server NEAR3 array)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S195	4	(((((server NEAR array NEAR controller) OR (traffic NEAR management) OR (Internet NEAR2 traffic NEAR management) OR controller ) SAME ((flow OR transmission) NEAR3 (control OR management OR control)) SAME flow NEAR3 component ) AND (client AND server)) AND (redirect\$3 OR direct\$3)) AND (switch WITH component)	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
S194	72	(((((server NEAR array NEAR controller) OR (traffic NEAR management) OR (Internet NEAR2 traffic NEAR management) OR controller ) SAME ((flow OR transmission) NEAR3 (control OR management OR control)) SAME flow NEAR3 component ) AND (client AND server)) AND (redirect\$3 OR direct\$3))	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16

## EAST Search History

S192	693	((server NEAR array NEAR controller) OR (traffic NEAR management) OR (Internet NEAR2 traffic NEAR management) OR controller ) SAME ((flow OR transmission) NEAR3 (control OR management OR control)) SAME flow NEAR3 component	US-PGPUB; USPAT; EPO; JPO; DERWEN T	OR	ON	2007/09/05 20:16
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**REMARKS**

Claims 1-30 and 32 were pending at the time the Notice of Final Office Action was mailed, with claim 31 having previously been canceled.

Claims 1-30 and 32 are presently canceled, thus, claims 1-32 all are canceled.

Claims 33-64 are presently added to capture the disclosed subject matter.

This response is filed with a Request for Continued Examination.

**Summary of Interview**

The Examiner was kind enough to schedule a telephonic interview with applicants' representative to discuss the case on July 23, 2007. The Examiner reviewed proposed amendments and supporting remarks presented by applicants' representative. The Examiner indicated that the proposed amendments appeared to resolve the rejections under 35 U.S.C. § 112. The Examiner suggested further amendments to further clarify distinctions between the claims and the cited references to advance the prosecution of this case. The claims presented here reflect the Examiner's comments.

Applicants and their representative are very grateful to the Examiner for his time and for his comments. Thank you very, very much.

## Gerezgiher, Yemane

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**From:** Mims, Byron (ASRC)  
**Sent:** Tuesday, September 11, 2007 6:36 PM  
**To:** Gerezgiher, Yemane  
**Cc:** Dill, Alyson  
**Subject:** Search for #09/814,415

Yemane,

The enclosed documents contain all of the results from your Fast & Focused search. No items were culled that seemed to teach to your request. However, I have enclosed all of the items for your perusal. Please let me know if I may assist you further.



Ger415AbstractNPL  
Files.doc



Ger415AbstractPat  
Files.doc



Ger415FullTexttPat  
Files.doc



SearchFeedback2.d  
oc

**Byron T. Mims**  
**ASRC Aerospace Corp.**  
**USPTO Contractor**  
**Patent Information Researcher [Searcher]**  
**Randolph Bldg 4b19 (4b28)**  
**EIC 2100**  
**(571) 272-3528**  
**Cell- 313.282.6139**  
**Byron.Mims@uspto.gov**



Set	Items	Description
S1	5042666	PACKET? OR FRAME? OR DATAGRAM? OR TRANSMI? OR DATA() FLOW? -
		OR DATAFLOW? OR FLOW??? OR TRAFFIC? OR NETWORKTRAFFIC? OR DAT-
		ABLOCK OR DATA() (BLOCK? OR BUNDL? OR UNIT? OR MESSAGE?)
S2	324436	S1(7N) (PLURAL? OR MULTI? OR SEVERAL OR MANY OR VARIE? OR G-
		ROUP? OR AGGREGAT? OR VARIOUS)
S3	457977	S1:S2(5N) (MONITOR? OR INSPECT? OR DETECT? OR DETERMIN? OR -
		IDENT? OR EXAMIN? OR COMPAR? OR CHECK? OR ASSESS? OR ANALY? OR
		RECOGN?)
S4	5841	S1(5N) (NO OR "NOT" OR WITHOUT OR T) (2W) (AFFILIAT? OR ASSOC-
		IAT? OR BOUND? OR CONNECT? OR LINK? OR COOPERAT? OR CORRELAT?
		OR RELAT?)
S5	4822	S1(5N) (NO OR "NOT" OR WITHOUT OR T) (2W) (IDENT? OR RECOGN? -
		OR KNOW? ? OR COMBIN? OR CONJUNCT? OR PARTNER? OR COUPL?
		OR J-
		OIN? OR CORRESPOND? OR MATCH?)
S6	22303	GATEWAY? OR MULTI() HOME? () HOST? ? OR ROUTER() (SERVER? OR C-
		LUSTER?) OR ROUTING? () DEVICE? ? OR BROUTER?
S7	1560065	ROUTER? OR SWITCH? OR NETWORK() LAYER() (DEVICE? OR BRIDGE?)
		OR PATH() ADAPTER? OR LAYER(2W) (DEVICE? OR MECHANISM? OR APPAR-
		AT? OR SWITCH?)
S8	30634	(INQUIR? OR QUERY? OR QUERIE? ? OR REQUEST? OR ASK??? OR D-
		EMAND? OR SEEK???) (5N) (COMMAND? OR INSTRUCT? OR RULE? ? OR PR-
		OCEDUR? OR DIRECT?)
S9	487881	(SEPARAT? OR SINGLE? OR SINGULAR OR ONE OR INDIVIDUAL? OR -
		RESPECTIVE? OR EACH OR INDEPEND? OR SEEMLESS?) (5N) (SCALAB? OR
		UPGRAD? OR INCREAS? OR DECREAS? OR EXPAND? OR GROW??? ? OR AD-
		APT? OR CHANG? OR MODIF?)
S10	88	S3 AND S4:S5 AND S8
S11	19	S10 AND S6:S7
S12	2	S11 AND S9
S13	48344	S6:S7 AND S9
S14	12	S13 AND INDEPEND? (2W) SCALABL?
S15	5	S14 AND S3
S16	5	S15 NOT S12
S17	3761	S13 AND S3
S18	2	S17 AND S4:S5 AND S8
S19	2	S18 NOT S16
S20	0	S19 NOT S12
S21	19	S6:S7 AND S3 AND S4:S5 AND S8
S22	34	S13 AND (FAILOVER? OR FAIL() OVER?)

S23	0	S22 AND INDEPEND? (2W) SCALABL?
S24	34	S22 AND S9
S25	7	S12 OR S15:S16 OR S18:S19
S26	7	S14 NOT S25
S27	34	S24 NOT S25:S26
S28	24	S27 AND AC=US/PR AND AY=(2001:2007)/PR
S29	25	S27 AND AC=US AND AY=2001:2007
S30	25	S27 AND AC=US AND AY=(2001:2007)/PR
S31	34	S27 AND PY=2001:2007
S32	34	S28:S31
S33	0	S27 NOT S32

File 350:Derwent WPIX 1963-2007/UD=200756

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File 347:JAPIO Dec 1976-2007/Mar(Updated 070809)

(c) 2007 JPO & JAPIO

16/69,K/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0014865976

WPI ACC NO: 2005-213692/200522

Related WPI Acc No: 2005-251966

XRPX Acc No: N2005-176829

**Communication path provision method in wireless/wired packet communication**

**network, involves establishing new hierarchical forwarding path between communication units, based on existing paths**

Patent Assignee: LOA K (LOAK-I); SUGINO M (SUGI-I)

Inventor: LOA K; SUGINO M

**Patent Family** (2 patents, 106 countries)

Patent			Application			
Number	Kind	Date	Number	Kind	Date	Update
WO 2005013058	A2	20050210	WO 2004US23840	A	20040723	200522 B
US 20050053014	A1	20050310	US 2003490334	P	20030725	200526 E
			US 2004891872	A	20040715	

Priority Applications (no., kind, date): US 2003490334 P 20030725; US 2004891872 A 20040715

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
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WO 2005013058	A2	EN	64	34	
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National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BW

BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR

HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW

MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR

TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Regional Designated States,Original: AT BE BG BW CH CY CZ DE DK EA EE ES

FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI

SK SL SZ TR TZ UG ZM ZW

US 20050053014 A1 EN 46 Related to Provisional US 2003490334

#### Alerting Abstract WO A2

NOVELTY - A hierarchical forwarding path (HFP) interconnects the communication units (CUa,CUb) and another HFP interconnects the communication units (CUb,CUc). A new HFP is established between the communication units (CUa,CUc) through the communication unit (CUb) based on existing HFPs.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.small world infrastructure of packet communication network; and
- 2.multi-protocol label switching domain of packet communication network.

USE - For providing communication path between interconnected communication units (CUs) of small world infrastructure (SWI) (claimed), in wireless/wired packet communication network.

ADVANTAGE - Manages traffic flow of communication packets. Enables the implementation of SWI underlay network in efficient, **scalable** and flexible packet communication system **independent** of underlying network routing protocols.

DESCRIPTION OF DRAWINGS - The figure shows an explanatory view of the multi-protocol label **switching** domain of packet communication network.

550 source or destination node  
558,564,574,588,602,612,622 CUs

**Title Terms/Index Terms/Additional Words:** COMMUNICATE; PATH; PROVISION; METHOD; WIRELESS; WIRE; PACKET; NETWORK; ESTABLISH; NEW; HIERARCHY; FORWARDING; UNIT; BASED; EXIST

#### **Class Codes**

International Classification (Main): G06F, H04L-012/28  
US Classification, Issued: 370254000

File Segment: EPI;

DWPI Class: T01; W01

Manual Codes (EPI/S-X): T01-N02A1; W01-A03B; W01-A06E1; W01-A06G2

**Alerting Abstract** ...small world infrastructure of packet communication network; and multi-protocol label **switching** domain of packet communication network...

...Manages traffic flow of communication packets. Enables the implementation of SWI underlay network in efficient, **scalable** and flexible packet communication system **independent** of underlying network routing protocols.

...

...DESCRIPTION OF DRAWINGS - The figure shows an explanatory view of the multi-protocol label **switching** domain of packet communication network.

#### **Original Publication Data by Authority**

#### **Original Abstracts:**

A small world infrastructure (SWI) of a general packet communications network and a method of **determining**, establishing and maintaining a hierarchical forwarding path (HFP) interconnecting communications units (CUs) of the small...

...A small world infrastructure (SWI) of a general packet

communications

network and a method of **determining** , establishing **and** maintaining a hierarchical forwarding path (HFP) interconnecting communications units (CUs) of the small world infrastructure...

16/69,K/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2007 The Thomson Corporation. All rts. reserv.

0013434581 - Drawing available  
WPI ACC NO: 2003-525564/200350  
XRPX Acc No: N2003-417046

**Packet storage subsystem for packet buffer management within a network processor includes buffer, address register and mapping system**  
Patent Assignee: SGS THOMSON MICROELTRN INC (SGSA); STMICROELECTRONICS INC  
(SGSA)

Inventor: CHANDRA R; KARIM F O; STRAMM B H

**Patent Family** (3 patents, 32 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
EP 1324566	A1	20030702	EP 2002258959	A	20021224	200350 B
US 20030123454	A1	20030703	US 2001345107	P	20011231	200351 E
			US 2002290766	A	20021108	
JP 2003229887	A	20030815	JP 2002377571	A	20021226	200362 E

Priority Applications (no., kind, date): US 2001345107 P 20011231; US 2002290766 A 20021108

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 1324566	A1	EN	9	3	

Regional Designated States,Original: AL AT BE BG CH CY CZ DE DK EE ES FI  
FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR  
US 20030123454 A1 EN Related to Provisional US 2001345107  
JP 2003229887 A JA 6

#### Alerting Abstract EP A1

NOVELTY - A buffer contains a number of entries each uniquely addressed by an n-bit address. An m-bit packet processing address register is employed by a processing unit to store an address for a packet being processed. The m-bit address value within the packet-processing address register is mapped or masked to produce an n-bit address for a buffer entry containing the packet being processed.

DESCRIPTION - INDEPENDENT CLAIMS are also included for (1) a **router** and (2) a method of operating a packet storage subsystem.

USE - For packet buffer management within a network processor.

ADVANTAGE - The system provides an **independent** and **scalable** packet buffer management architecture for network processors.

DESCRIPTION OF DRAWINGS - The drawing shows a system **independent** and **scalable** packet buffer management architecture.

**Title Terms/Index Terms/Additional Words:** PACKET; STORAGE; SUBSYSTEM; BUFFER; MANAGEMENT; NETWORK; PROCESSOR; ADDRESS; REGISTER; MAP; SYSTEM

### Class Codes

International Classification (Main): H04L-012/28, H04L-012/56, H04L-029/06

(Additional/Secondary): G06F-012/02, H04L-012/46

US Classification, Issued: 370395720

File Segment: EPI;

DWPI Class: T01; W01

Manual Codes (EPI/S-X): T01-C07C2; W01-A03B; W01-A06G2

### Original Titles:

...A system **independent** and **scalable** packet buffer management architecture for network processors...

...SYSTEM INDEPENDENT AND **SCALABLE** PACKET BUFFER MANAGEMENT ARCHITECTURE FOR NETWORK PROCESSOR...

...System **independent** and **scalable** packet buffer management architecture for network processors

**Alerting Abstract** DESCRIPTION - INDEPENDENT CLAIMS are also included for

(1) a **router** and (2) a method of operating a packet storage subsystem...

...ADVANTAGE - The system provides an **independent** and **scalable** packet buffer management architecture for network processors...

...DESCRIPTION OF DRAWINGS - The drawing shows a system **independent** and **scalable** packet buffer management architecture.

### Original Publication Data by Authority

### Original Abstracts:

...packets for processing by one or more network processors employs an empty buffer address register **identifying** where a next **received packet**

should be stored, a next **packet** address register **identifying** the next **packet** to be processed, and a **packet** -processing address register **within** each network processor **identifying** the **packet** being **processed** by that network processor. The n-bit addresses to the buffer are mapped or masked from/to...

...A circular buffer storing packets for processing by one or more network processors **employs** an empty buffer address register **identifying** where a next received **packet** should be stored, a next **packet** address register **identifying** the next **packet** to be **processed**, and a **packet**

-processing address **register** within each network processor  
identifying  
the **packet** being processed by that network processor. The **n-bit**  
addresses to the buffer are mapped or masked from/to the m-bit  
packet-processing...



16/69,K/3 (Item 3 from file: 350) (\*\*Your Assignee\*\*)

DIALOG(R)File 350:Derwent WPIX

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0012296941 - Drawing available

WPI ACC NO: 2002-238064/200229

Related WPI Acc No: 2003-090917

XRPX Acc No: N2002-183331

**Communication controller for local area network, has switch component whose capacity and control component capacity independently supports data**

**flow directed to requested resource over network**

Patent Assignee: F5 NETWORKS INC (FFIV-N)

Inventor: GILDE R G; HARMS S L

**Patent Family** (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20010037387	A1	20011101	US 2000191019	P	20000321	200229 B
			US 2001814415	A	20010321	

Priority Applications (no., kind, date): US 2000191019 P 20000321; US 2001814415 A 20010321

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20010037387	A1	EN	31	22	Related to Provisional US 2000191019

#### Alerting Abstract US A1

NOVELTY - A control component associates a selected connection to a requested source, when control component **determines** that **data flow** is

unassociated with connection of requested resource. A **switch** directs data

flow to requested resource, whose capacity and control component capacity

independently supports number of data flow, that are directed to requested

resource over the network.

DESCRIPTION - An INDEPENDENT CLAIM is also included for communication control method.

USE - For controlling communication in networks such as local area network (LAN), wide area network (WAN) and virtual private network (VPN).

ADVANTAGE - Using data flow segment processes packets and sends to selected server without inversion of the system, thereby efficiency of the controller is improved.

DESCRIPTION OF DRAWINGS - The figure shows the system diagram of the controller.

**Title Terms/Index Terms/Additional Words:** COMMUNICATE; CONTROL; LOCAL; AREA

; NETWORK; **SWITCH** ; COMPONENT; CAPACITY; INDEPENDENT; SUPPORT; DATA; FLOW; DIRECT; REQUEST; RESOURCE

**Class Codes**

International Classification (Main): G06F-015/173  
(Additional/Secondary): G06F-015/16  
US Classification, Issued: 709225000, 709232000

File Segment: EPI;  
DWPI Class: T01; W01  
Manual Codes (EPI/S-X): T01-H07C3; T01-H07C5; T01-H07C5C; T01-H07C5E;  
T01-H07C5S; W01-A06B5A; W01-A06B5B; W01-C03A

**Communication controller for local area network, has switch component whose capacity and control component capacity independently supports data flow directed to requested resource...**

...NOVELTY - A control component associates a selected connection to a requested source, when control component **determines** that **data flow** is unassociated with connection of requested resource. A **switch** directs data flow to requested resource, whose capacity and control component capacity independently supports number...

**Title Terms.../Index Terms/Additional Words: SWITCH ;**

**Original Publication Data by Authority**

**Original Abstracts:**

...of the repetitive chores including statistics gathering and per-packet policy enforcement (e.g. packet **switching** ). The DFS also **performs** tasks such as that of a **router** , a **switch** , or a routing **switch** . The CS determines **the** translation to **be** performed on each **flow** of **packets** , and thus performs high-level control functions and per-flow policy enforcement. Network address translation...

...The CS and DFS may be incorporated into one or more separate blocks. The CS and DFS are **independently scalable** . Additionally, the **functionality** of either the DFS or the CS may be separately implemented in software and/or hardware.

**Claims:**

...apparatus for directing communications over a network, comprising:  
(a)  
a control component that receives a **data flow** requesting a resource and **determines** when the **data flow** is **unassociated** with a connection to a requested resource, **wherein** the control component associates a selected connection to the requested resource when the control component **determines** the **data flow** is unassociated with the connection to

the

**requested** resource; and ( b ) a **switch** component that employs the connection associated with the data flow to direct **the** data flow to the

requested resource, wherein a capacity of the **switch** component and a capacity of the control component are **independently scalable** to **support** the number of data flows that are directed to **requested resources** over the network.

16/69,K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0010649682 - Drawing available

WPI ACC NO: 2001-257355/200126

Related WPI Acc No: 2001-521304; 2001-521305

XRPX Acc No: N2001-183587

**Cryptography acceleration method involves splitting incoming data packet**

**into multiple fixed size cells and processing a fixed size cell**

Patent Assignee: BROADCOM CORP (BROA-N)

Inventor: KRISHNA S; LAW P; LIN D C; OWEN C; TARDO J J

**Patent Family** (11 patents, 93 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2001005089	A2	20010118	WO 2000US18545	A	20000707	200126	B
AU 200070514	A	20010130	AU 200070514	A	20000707	200127	E
EP 1192783	A2	20020403	EP 2000959143	A	20000707	200230	E
			WO 2000US18545	A	20000707		
US 6477646	B1	20021105	US 1999142870	P	19990708	200276	E
			US 1999159012	P	19991012		
			US 2000510486	A	20000223		
US 20020199101	A1	20021226	US 1999142870	P	19990708	200304	E
			US 1999159012	P	19991012		
			US 2000510486	A	20000223		
			US 2002227491	A	20020823		
US 20030014627	A1	20030116	US 1999142870	P	19990708	200308	E
			US 1999159012	P	19991012		
			US 2000610798	A	20000706		
			US 2002218159	A	20020812		
EP 1192783	B1	20040204	EP 2000959143	A	20000707	200410	E
			WO 2000US18545	A	20000707		
DE 60008109	E	20040311	DE 60008109	A	20000707	200419	E
			EP 2000959143	A	20000707		
			WO 2000US18545	A	20000707		
US 6971006	B2	20051129	US 1999142870	P	19990708	200578	E
			US 1999159012	P	19991012		
			US 2000510486	A	20000223		
			US 2002227491	A	20020823		
US 20060021022	A1	20060126	US 1999142870	P	19990708	200609	E
			US 1999159012	P	19991012		
			US 2000510486	A	20000223		
			US 2002227491	A	20020823		
			US 2005229457	A	20050916		
US 7124296	B2	20061017	US 1999142870	P	19990708	200668	E
			US 1999159012	P	19991012		
			US 2000510486	A	20000223		
			US 2002227491	A	20020823		
			US 2005229457	A	20050916		

Priority Applications (no., kind, date): US 1999142870 P 19990708; US 1999159012 P 19991012; US 2000510486 A 20000223; US 2000610798 A 20000706; US 2002218159 A 20020812; US 2002227491 A 20020823; US 2005229457 A 20050916

**Patent Details**

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2001005089	A2	EN	38	8	
National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY					
BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN					
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ					
PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH					
GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW					
AU 200070514	A	EN			Based on OPI patent WO 2001005089
EP 1192783	A2	EN			PCT Application WO 2000US18545
Based on OPI patent WO 2001005089					
Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR					
IE IT LI LT LU LV MC MK NL PT RO SE SI					
US 6477646	B1	EN			Related to Provisional US
1999142870					
					Related to Provisional US
1999159012					
US 20020199101	A1	EN			Related to Provisional US
1999142870					
					Related to Provisional US
1999159012					
					Continuation of application US
2000510486					
					Continuation of patent US 6477646
US 20030014627	A1	EN			Related to Provisional US
1999142870					
					Related to Provisional US
1999159012					
					Continuation of application US
2000610798					
EP 1192783	B1	EN			PCT Application WO 2000US18545
Based on OPI patent WO 2001005089					
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE					
IT LI LU MC NL PT SE					
DE 60008109	E	DE			Application EP 2000959143
PCT Application WO 2000US18545					
Based on OPI patent EP 1192783					
Based on OPI patent WO 2001005089					
US 6971006	B2	EN			Related to Provisional US
1999142870					
					Related to Provisional US
1999159012					
					Continuation of application US
2000510486					
					Continuation of patent US 6477645
US 20060021022	A1	EN			Related to Provisional US
1999142870					
					Related to Provisional US
1999159012					
					Continuation of application US
2000510486					

2002227491		Continuation of application US
		Continuation of patent US 6477646
US 7124296	B2 EN	Continuation of patent US 6971006
1999142870		Related to Provisional US
1999159012		Related to Provisional US
2000510486		Continuation of application US
2002227491		Continuation of application US
		Continuation of patent US 6477646
		Continuation of patent US 6971006

**Alerting Abstract WO A2**

NOVELTY - The incoming IP packet is split into multiple fixed size cells if it is larger than single fixed size cell, else the packet is converted into single fixed size cell. The fixed size cell is processed and then recombined into a processed IP packet. The processed IP packet is stored in system memory.

DESCRIPTION - Processing of fixed size cell obtained by splitting incoming IP packet, involves performing encryption-decryption and authentication-digital signature processing. INDEPENDENT CLAIMS are also included for the following:

1. Cryptography acceleration chip;
2. Method for sequencing fixed size cells in cryptography acceleration chip

USE - For accelerating cryptography processing of IP packets, in **router**, **gateway** of network.

ADVANTAGE - Allows to fetch and process cells in predictable time frame, as pipeline has known throughput and timing characteristics. Local memory is not required to store packet data and control parameters, hence implementation cost is reduced. Overall performance is improved, since both encryption-decryption and authentication-digital signature processing are ensured.

DESCRIPTION OF DRAWINGS - The figure shows block diagram of cryptography acceleration chip.

**Title Terms/Index Terms/Additional Words:** ACCELERATE; METHOD; SPLIT; INCOMING; DATA; PACKET; MULTIPLE; FIX; SIZE; CELL; PROCESS

**Class Codes**

International Classification (Main): H04L-029/06, H04L-009/00  
International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0001/00	A	I		R	20060101
G06F-0015/16	A	I	F	B	20060101
G06F-0021/00	A	I		R	20060101
G06F-0009/38	A	I		R	20060101
H04L-0009/00	A	I	F	B	20060101
H04L-0009/32	A	I	L	B	20060101
G06F-0001/00	C	I		R	20060101
G06F-0021/00	C	I		R	20060101
G06F-0009/38	C	I		R	20060101

US Classification, Issued: 713161000, 713189000, 713153000, 726013000,  
713161000, 713189000, 713181000, 713189000, 713161000

File Segment: EPI;

DWPI Class: W01

Manual Codes (EPI/S-X): W01-A05A; W01-A06B7

**Alerting Abstract** ...USE - For accelerating cryptography processing  
of IP  
packets, in **router** , **gateway** of network.

#### Original Publication Data by Authority

#### Original Abstracts:

...possible to fetch and process the cells in a predictable time frame.  
The

architecture is **scalable** and is also **independent** of the type of  
cryptography performed. The cells may be fetched ahead of time  
(pre-fetched) and the pipeline...possible to fetch and process the  
cells in

a predictable time frame. The architecture is **scalable** and is also  
**independent** of the type of **cryptography** performed. The cells **may**  
be

fetched ahead of time (pre-fetched) and the pipeline may be staged in  
such

...possible to fetch and process the cells in a predictable time frame.  
The

architecture is **scalable** and is also **independent** of the type of  
cryptography performed. The cells may be fetched ahead of time ( **pre**  
-fetched) and the **pipeline** may be staged in such a manner that  
attached

(local) memory is not required to store packet or control pa...possible  
to

fetch and process the cells in a predictable time frame. The  
architecture

is **scalable** and is also **independent** of the type of cryptography  
performed. The cells may be fetched ahead of time (pre-fetched) and the  
pipeline **may** be staged in **such** a manner that attached (local)  
memory is

not required to store packet data or control...

...possible to fetch and process the cells in a predictable time frame.  
The

architecture is **scalable** and is also **independent** of the type of  
cryptography performed. The cells may be fetched ahead of time  
(pre-fetched) and the pipeline may be staged in such a manner that

attached ( **local** ) memory is not required to store packet data or control parameters....possible to fetch and process the cells in a predictable time frame. The architecture is **scalable** and is also **independent** of the type of cryptography performed. The cells may be fetched ahead of time (pre-fetched) and the pipeline may be staged in such a manner that attached (local) **memory** is not required to store packet data or control parameters.

...

**Claims:**

...first entity external to the cryptography accelerator;splitting the incoming packet into at least one **fixed** -sized cell; **identifying** context information comprising key and algorithm information for the at least one fixed-sized cell;...What is claimed is:<b>1</b>. A method for cryptography processing of **data** packets, the method **comprising** :identifying a first fixed-sized cell at a cryptography accelerator, the first fixed-sized cell

...

...identifying a first key and a first algorithm for cryptographically processing the first fixed-sized **cell** ;identifying **a** second fixed-sized cell at **a** cryptography accelerator, the second fixed-sized ol>1. A method for cryptography processing **of** data packets, the **method** comprising:identifying a first fixed-sized cell at a cryptography accelerator, the first fixed-sized



16/69,K/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0008595431 - Drawing available

WPI ACC NO: 1998-130994/199812

XRPX Acc No: N1998-103354

**High speed Internet access system and network management system - allocates**

**bandwidth to requesting devices according to bandwidth utilisation by other**

**devices, demand of request device and class or grade of service**

Patent Assignee: ENNS F (ENNS-I); GRONSKI J M (GRON-I); HYBRID NETWORKS

INC (HYBR-N); HYBRID PATENTS INC (HYBR-N); KIM J C (KIMJ-I); MOURA E J

(MOUR-I); NEELMEGH R (NEEL-I)

Inventor: ENNS F; GRONSKI J M; KIM J C; MOURA E J; NEELMEGH R

**Patent Family** (8 patents, 74 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 1998005144	A1	19980205	WO 1997US12935	A	19970724	199812 B
AU 199742293	A	19980220	AU 199742293	A	19970724	199828 E
CN 1242896	A	20000126	CN 1997198235	A	19970724	200024 E
US 6658010	B1	20031202	US 199622644	P	19960725	200379 E
			US 1997899883	A	19970724	
US 6785288	B1	20040831	US 199622644	P	19960725	200457 E
			US 1997899883	A	19970724	
			US 2000610356	A	20000705	
US 20050018697	A1	20050127	US 199622644	P	19960725	200509 E
			US 1997899883	A	19970724	
			US 2003725919	A	20031202	
US 7002971	B1	20060221	US 199622644	P	19960725	200615 E
			US 1997899883	A	19970724	
			US 2000610357	A	20000705	
US 20060098669	A1	20060511	US 199622644	P	19960725	200633 E
			US 1997899883	A	19970724	
			US 2000610357	A	20000705	
			US 2005311814	A	20051219	

Priority Applications (no., kind, date): US 2005311814 A 20051219; US 2003725919 A 20031202; US 2000610357 A 20000705; US 2000610356 A 20000705; US 1997899883 A 19970724; US 199622644 P 19960725

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
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WO 1998005144	A1	EN	80	5	
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National Designated States,Original: AL AM AT AU AZ BA BB BG BR BY CA CH

CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT

LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA

UG US UZ VN

Regional Designated States,Original: AT BE CH DE DK EA ES FI FR GB GH GR

IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 199742293	A	EN	Based on OPI patent WO 1998005144
US 6658010	B1	EN	Related to Provisional US
199622644			
US 6785288	B1	EN	Related to Provisional US
199622644			
			Division of application US
1997899883			
US 20050018697	A1	EN	Related to Provisional US
199622644			
			Continuation of application US
1997899883			
			Continuation of patent US 6658010
US 7002971	B1	EN	Related to Provisional US
199622644			
			Division of application US
1997899883			
			Division of patent US 6658010
US 20060098669	A1	EN	Related to Provisional US
199622644			
			Division of application US
1997899883			
			Division of application US
2000610357			
			Division of patent US 6658010
			Division of patent US 7002971

#### **Alerting Abstract WO A1**

The two-way asymmetric communication system has scalable upstream and downstream paths that enable remote data processor unit to communicate with

a server. The system has a common routing/ **switching** backplane for providing intercommunication services among multiple communication devices

including the server. An independent upstream controller communicates with

the backplane operating in accordance with an upstream protocol for receiving information packets from the remote processor devices. The upstream controller includes network operating algorithms for

**analysing**

response **packets transmitted** by the downstream controller to **determine**

the operational status of an identified remote data processor device.

An independent downstream controller communicates with the backplane for

transmitting data packets to the remote data processor units in accordance

with a downstream protocol. The independent downstream controller **transmits** control **packets** directed to an **identified** remote data

processor that instructs the device to respond with predetermined information in accordance with the control packet. A network manager is in

communication with the independent upstream and downstream controllers through the backplane for managing the two-way communications between

the  
remote data processor devices and the server.

USE - For controlling data flow in asymmetrical network in which users share common broadband medium. Manages configuration of remote devices.

ADVANTAGE - Provides thorough packet-based control flexibility in assigning configuration parameters and bandwidth utilisation by providing downloadable network operating software from network management centre to remote devices. Permits **independent scalability** of upstream and downstream capacity **separately**.

**Title Terms/Index Terms/Additional Words:** HIGH; SPEED; ACCESS; SYSTEM; NETWORK; MANAGEMENT; ALLOCATE; BANDWIDTH; REQUEST; DEVICE; ACCORD; UTILISE; DEMAND; CLASS; GRADE; SERVICE

#### **Class Codes**

International Classification (Main): H04J-003/16, H04L-012/16, H04L-012/28,

H04L-012/56

International Classification (+ Attributes)

IPC + Level Value Position Status Version

H04L-0012/28 A I F B 20060101

US Classification, Issued: 370401000, 370401000, 370401000, 370401000, 370404000, 370401000, 709217000

File Segment: EPI;

DWPI Class: W01; W02

Manual Codes (EPI/S-X): W01-A01B2; W01-A03B; W01-A03D; W01-A06B7; W01-A06E1A; W01-A06F; W01-A06G2; W02-F03A5; W02-F10E; W02-K03

**Alerting Abstract** ...remote data processor unit to communicate with a server. The system has a common routing/ **switching** backplane for providing intercommunication services among multiple communication devices including the server. An independent upstream...

...information packets from the remote processor devices. The upstream controller includes network operating algorithms for **analysing** response **packets transmitted** by the downstream controller to **determine** the operational status of an identified remote data processor device...

...the remote data processor units in accordance with a downstream protocol. The independent downstream controller **transmits** control **packets** directed to an **identified** remote data processor that instructs the device to respond with predetermined information in accordance with...

...utilisation by providing downloadable network operating software from network management centre to remote devices. Permits **independent scalability** of upstream and downstream capacity **separately**.  
**Original Publication Data by Authority**

**Original Abstracts:**

...configuration of remote devices in a broadband network. A modular architecture of the system permits **independent scalability** of upstream and downstream capacity **separately** for **each** of the upstream and downstream physical paths. Allocation of downstream bandwidth to requesting devices is made according...

...which may include an RF, satellite and cable medium with or without a telephony or **router** return path.

...

...configuration of remote devices in a broadband network. A modular architecture of the system permits **independent scalability** of upstream and downstream capacity **separately** for **each** of the upstream and downstream physical **paths**. Allocation of downstream bandwidth to requesting devices is made according to bandwidth utilization by other...

...which may include an RF, satellite and cable medium with or without a telephony or **router** return path.

...

...configuration of remote devices in a broadband network. A modular architecture of the system permits **independent scalability** of upstream and downstream capacity **separately** for **each** of the upstream and **downstream physical** paths. Allocation of downstream bandwidth to requesting devices is made according to bandwidth utilization by other devices, bandwidth demand by the...

...which may include an RF, satellite and cable medium with or without a telephony or **router** return path.

**Claims:**

We claim:<b>1</b>. A two-way asymmetric communication system having **independently scalable** upstream and downstream paths that enable remote

**data processor** devices to communicate with a server, said system comprising:a common routing/ **switching** backplane for providing intercommunication services among multiple communication devices including **said server**,an independent upstream controller in communication with said backplane operating in accordance with an...

...receiving information packets from said remote data processor devices, said upstream controller including network operating **algorithms** for **analyzing response packets transmitted** by said downstream

controller  
to **determine** operational status of an **identified remote data**  
processor device, an independent downstream **controller** in  
communication  
with said **backplane** for **transmitting data packets** to said remote  
data  
processor devices in accordance with a downstream protocol, said  
independent downstream controller being operative to **transmit control**  
**packets** directed to an **identified** remote data processor device that  
instructs said device to respond with predetermined information in  
**accordance** with said control **packet**, and a network manager in  
communication with said independent upstream and downstream controllers  
through said...

...What is claimed is: **1**. A two-way asymmetric communication  
system  
having **independently scalable** upstream and downstream paths that  
enable  
remote data processor devices to communicate with a server, said system  
comprising: a common routing/ **switching** backplane for providing  
intercommunication services among **multiple communication** devices; an  
**independent** upstream controller in communication with the backplane  
operating in accordance with an upstream protocol for receiving  
information  
packets from the **remote** data processor devices; an independent  
downstream  
controller in communication with the backplane for transmitting data...

...one of the higher and lower speed upstream channels, and a network  
manager that effects **monitoring** of usage of said higher **speed**  
upstream  
channels and balancing of **traffic** loads in said upstream channels by  
reassigning a requesting remote device otherwise assigned to a...

...and to a demand by said requesting remote device for a higher  
upstream  
data transfer **rate**; wherein said network manager balances **traffic**  
loads  
in accordance with at least one bandwidth reserved by other remote  
devices  
an a div xhtml:class="heading">We claim: 1. A two-way asymmetric  
communication system having **independently scalable** upstream and  
downstream paths that enable remote data processor devices to  
communicate  
with a server, said system comprising: a common routing/ **switching**  
backplane for providing intercommunication services among multiple  
communication devices including said server, an independent upstream...

...packets from said remote data processor devices, said upstream  
controller including network operating algorithms for **analyzing**  
response  
**packets transmitted** by said downstream controller to **determine**  
operational status of a first identified remote data processor **device**  
, an  
**independent** downstream controller in communication with said  
backplane  
for transmitting data packets to said remote data processor devices in

accordance with a downstream **protocol** , said independent downstream controller being operative to transmit control **packets** directed to said first **identified** remote data processor device that instructs said device to respond with predetermined information in accordance...

...packet, a network manager in communication with said independent upstream and downstream controllers through said **backplane** for **effecting management** of two-way communications between **said** first remote data processor device and a second remote data processor device, and said server

...

...traffic loads in the downstream path in order to provide greater use of available downstream **channels** according to **traffic** conditions.

26/69,K/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0015545633 - Drawing available

WPI ACC NO: 2006-109787/200611

Related WPI Acc No: 2006-066164; 2006-066165; 2006-066166; 2006-077781;  
2006-087280; 2006-087281; 2006-087295; 2006-109771; 2006-109791;  
2006-272175; 2007-340710; 2007-402608; 2007-431910; 2007-431921;  
2007-432493; 2007-444770; 2007-444874; 2007-505423

XRPX Acc No: N2006-095311

**Method for providing two-levels of load balancing in distributed system,**

**involves receiving service request at identified application server and assigning to one of instances based on current processing requirements of instances**

Patent Assignee: GLENAYRE ELECTRONICS INC (GLEN-N); ARCHER S R (ARCH-I);

MALITA F D (MALI-I); MORAES I M (MORA-I); PLOTKY J S (PLOT-I)

Inventor: ARCHER S R; FLORIN M D; MALITA F D; MEYERS K E; MORAES I M; PLOTKY J S; RUBENSTEIN P E; SHAFFORD A R; FLORIN M; MEYERS K; MORAES I;

RUBENSTEIN P; SHAFFORD A

**Patent Family** (4 patents, 110 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2006004995	A2	20060112	WO 2005US23469	A	20050630	200611	B
US 20060209695	A1	20060921	US 200580744	A	20050315	200663	E
			US 2005170457	A	20050629		
EP 1766881	A2	20070328	EP 2005769212	A	20050630	200725	E
			WO 2005US23469	A	20050630		
IN 200601544	P3	20070518	WO 2005US23469	A	20050630	200748	
NCE							
			IN 2006MN1544	A	20061215		

Priority Applications (no., kind, date): US 2004584117 P 20040630; US 200580744 A 20050315; US 2005170457 A 20050629; IN 2006MN1544 A 20061215

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2006004995	A2	EN	29	3	

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BW

BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR

HU ID IL IN IS JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN

MW MX MZ NA NG NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SM SY TJ

TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Regional Designated States,Original: AT BE BG BW CH CY CZ DE DK EA EE ES

FI FR GB GH GM GR HU IE IS IT KE LS LT LU MC MW MZ NA NL OA PL PT RO SD

SE SI SK SL SZ TR TZ UG ZM ZW

US 20060209695 A1 EN C-I-P of application US 200580744  
EP 1766881 A2 EN PCT Application WO 2005US23469  
Based on OPI patent WO 2006004995  
Regional Designated States, Original: AT BE BG CH CY CZ DE DK EE ES FI  
FR  
GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR  
IN 200601544 P3 EN PCT Application WO 2005US23469

**Alerting Abstract** WO A2

NOVELTY - The method involves identifying one of multiple application servers (AS) to process service request received from one of multiple media

servers (MS) at one of **switching** systems. The request is forwarded to identified AS to establish instances of servicing process for handling the

request. The request is received at identified AS and assigned to one of

the instances based on current processing requirements of instances.

DESCRIPTION - An INDEPENDENT CLAIM is also included for distributed telecommunication system.

USE - For providing two-levels of load balancing in distributed system

e.g. distributed telecommunication system (claimed) such as multi-functional telecommunication system, distributed internet protocol

(IP) system for providing telecommunication service e.g. voice mail, call

forwarding, missed call notification, multimedia messaging service (MMS),

multi-party personal conference service, voice-enabled messaging service, voice MMS.

ADVANTAGE - Allows garbage collection process to operate off line without impacting the performance experienced by the user. **Each** of the servers is

**independently scalable** and inter connected to the internet protocol (IP) network, thus the service can be geographically distributed but still

operate as single communication platform. Allows multiple media servers to

share signaling links and point codes, thereby providing significant cost

saving. Improves the customer loyalty and reduces service provided operating cost through fewer routine service calls.

DESCRIPTION OF DRAWINGS - The figure shows a system diagram of the next-generation communication platform.

110 public **switched** telephone network

230 automatic speech recognition (ASR)

**Title Terms/Index Terms/Additional Words:** METHOD; TWO; LEVEL; LOAD; BALANCE

; DISTRIBUTE; SYSTEM; RECEIVE; SERVICE; REQUEST; IDENTIFY; APPLY; SERVE;

ASSIGN; ONE; INSTANCE; BASED; CURRENT; PROCESS; REQUIRE

**Class Codes**



International Classification (Main): H04L-012/28

International Classification (+ Attributes)

IPC + Level Value Position Status Version

H04J-0001/16 A I F B 20060101

H04L-0012/28 A I F B 20060101

H04L-0012/56 A I L B 20060101

H04J-0001/00 C I F B 20060101

H04L-0012/28 C I L B 20060101

H04L-0012/28 C I B 20060101

H04L-0012/56 C I L B 20060101

H04L-0012/56 C I B 20060101

US Classification, Issued: 370235000

File Segment: EPI;

DWPI Class: W01

Manual Codes (EPI/S-X): W01-C02A7; W01-C02B7C; W01-C02B7F; W01-C05B4A

**Alerting Abstract** ...to process service request received from one of multiple media servers (MS) at one of **switching** systems. The request is

forwarded to identified AS to establish instances of servicing process for

...

...garbage collection process to operate off line without impacting the performance experienced by the user. **Each** of the servers is **independently scalable** and inter connected to the internet protocol (IP)

network, thus the service can be geographically...

...110 public **switched** telephone network...

#### **Original Publication Data by Authority**

#### **Original Abstracts:**

...two levels - the component level and the process level. At the component level, a virtual **switch** is employed to route service requests to one of a group of components that are configured to process the service request. The decision can be made autonomously by the virtual **switch** or entirely based on information provided by the component or even by a combination of...

...two levels--the component level and the process level. At the component level, a virtual **switch** is employed to route service requests to one of a group of components that are configured to process the service request. The decision can be made autonomously by the virtual **switch** or entirely based on information provided by the component or even by a combination of...

...two levels - the component level and the process level. At the component

level, a virtual **switch** is employed to route service requests to one of a group of components that are configured to process the service request. The decision can be made autonomously by the virtual **switch** or entirely based on information provided by the component or even by a combination of...

**Claims:**

...first class of components interface to the second class of components through one or more **switching** systems, the method comprising the steps of: receiving a service request from one of the plurality of first class components at one of the **switching** systems; the **switching** system identifying one of a plurality of a second class of components for processing the...

26/69,K/2 (Item 2 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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0013268225 - Drawing available  
WPI ACC NO: 2003-354061/200333  
XRPX Acc No: N2003-282927

**Packet control function in wireless communication network, has multiple separately addressed internet protocol interfaces in form of pseudo PCF for**

**communicating with packet data serving nodes**

Patent Assignee: PALAKODETY R (PALA-I); SIVALINGHAM S (SIVA-I);  
TELEFONAKTIEBOLAGET ERICSSON L M (TELF)

Inventor: PALAKODETY R; SIVALINGHAM S

**Patent Family** (5 patents, 99 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20030053465	A1	20030320	US 2001957101	A	20010920	200333	B
WO 2003026234	A1	20030327	WO 2002IB3260	A	20020814	200333	E
AU 2002321723	A1	20030401	AU 2002321723	A	20020814	200452	E
JP 2005503724	W	20050203	WO 2002IB3260	A	20020814	200516	E
			JP 2003529717	A	20020814		
CN 1620786	A	20050525	CN 2002818437	A	20020814	200560	E

Priority Applications (no., kind, date): US 2001957101 A 20010920

**Patent Details**

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20030053465	A1	EN	11	5	
WO 2003026234	A1	EN			

National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY

BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID

IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ

NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VC

VN YU ZA ZM ZW

Regional Designated States,Original: AT BE BG CH CY CZ DE DK EA EE ES FI

FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG

ZM ZW

AU 2002321723	A1	EN		Based on OPI patent	WO 2003026234
JP 2005503724	W	JA	40	PCT Application	WO 2002IB3260
				Based on OPI patent	WO 2003026234

**Alerting Abstract US A1**

NOVELTY - The packet control function (PCF) (12) has multiple separately addressed internet protocol (IP) interfaces in the form of pseudo PCF for communicating with packet data serving nodes (PSDN) (14) and a base station controller (BSC) interface for communicating with BSC (20). **Switching** and control resources of PCF direct the packet data through one of IP

interfaces as desired.

DESCRIPTION - An INDEPENDENT CLAIM is also included for method of providing data throughput scalability in packet control function.

USE - For routing packet data between base station controller and packet data serving node in wireless communication network.

ADVANTAGE - Improves the packet control function traffic throughput by simply increasing the number of IP interfaces implemented within the PCF.

DESCRIPTION OF DRAWINGS - The figure shows a wireless communication network including PCF.

12 packet control function  
14 packet data serving node  
20 base station controller

**Title Terms/Index Terms/Additional Words:** PACKET; CONTROL; FUNCTION; WIRELESS; COMMUNICATE; NETWORK; MULTIPLE; SEPARATE; ADDRESS; PROTOCOL;  
INTERFACE; FORM; PSEUDO; DATA; SERVE; NODE

#### **Class Codes**

International Classification (Main): H04L-012/28, H04L-012/56

(Additional/Secondary): H04B-007/26, H04Q-007/30

US Classification, Issued: 370401000, 370352000

File Segment: EPI;

DWPI Class: W01

Manual Codes (EPI/S-X): W01-A03B; W01-A06F2A; W01-A06G2

...nodes (PDSN) (14) and a base station controller (BSC) interface for communicating with BSC (20). **Switching** and control resources of PCF direct the packet data through one of IP interfaces as...

#### **Original Publication Data by Authority**

#### **Original Abstracts:**

A packet control function (PCF) in a wireless communication network comprises a **scalable** architecture allowing **independently addressable**

packet data **serving** node (PDSN) interfaces to be added as needed or desired. Each interface functions as an...

...A packet control function (PCF) in a wireless communication network comprises a **scalable** architecture allowing **independently addressable** packet data serving node ( **PDSN** ) interfaces to **be** added as needed or desired. Each interface functions as an independent IP interface supporting data...

#### **Claims:**

...with the PDSN;a BSC interface for communicating with the one or more BSCs; and **switching** and control resources to direct the data through at least one of said two **or** more IP interfaces as desired.

26/69,K/3 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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0012988504 - Drawing available

WPI ACC NO: 2003-066217/200306

XRPX Acc No: N2003-051298

**Electronic process control device for industrial applications, controls electrical current in two-wire loop power supply to correspond with received data**

Patent Assignee: SOR INC (SORS-N)

Inventor: BARTRUM M S; DONNELLY J M; KUMARAKULASINGAM P; MA X; WOMACK A D

**Patent Family** (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 6452493	B1	20020917	US 2000487019	A	20000119	200306 B

Priority Applications (no., kind, date): US 2000487019 A 20000119

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6452493	B1	EN	8	2	

#### Alerting Abstract US B1

NOVELTY - A **switch** is **switched** when an environment condition sensed by a sensor (26) reaches a selected threshold. A two-wire loop power supply powering the sensor and the **switch** , has a transmitter for transmitting the sensed information. A controller (12) controls an electrical current in the power supply loop to correspond with received data based on sensed condition.

USE - For sensing process variable in industrial process.

ADVANTAGE - Significantly reduces the response time required to sense the process variable and transmit the output through the power supply loop. Transmission through the two-wire loop is accurate and fail-safe, and results in longer, improved mean time before failure of the device. Enables to run the diagnostics and/or program the transmission output, without affecting the transmission output, since the components are independent.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the electronic process control device.

12 Controller

26 Sensor

**Title Terms/Index Terms/Additional Words:** ELECTRONIC; PROCESS; CONTROL; DEVICE; INDUSTRIAL; APPLY; ELECTRIC; CURRENT; TWO; WIRE; LOOP; POWER; SUPPLY; CORRESPOND; RECEIVE; DATA.

#### Class Codes

International Classification (Main): G08B-001/08

US Classification, Issued: 340533000

File Segment: EPI;

DWPI Class: T01; U13; U14; U21; W02; W05

Manual Codes (EPI/S-X): T01-J07B; T01-J07B1; T01-N01A2E; U13-B04; U13-D01B;

U14-E05A3; U21-B02A3; W02-C01A3; W05-D07B

...NOVELTY - A **switch** is **switched** when an environment condition sensed by a sensor (26) reaches a selected threshold. A two-wire loop power supply powering the sensor and the **switch** , has a transmitter for transmitting the sensed information. A controller (12) controls an electrical current...

#### **Original Publication Data by Authority**

#### **Original Abstracts:**

...instruments includes a sensor for sensing a process variable in a processing environment, and a **switch** , a gauge, and a transmitter. The sensor, **switch** , gauge, and transmitter, a controller to which each of the stated and related components are...

...to a level corresponding to the level of the processed variables sensed.

Each of the **switch** , gauge, and transmitter are **independently scalable**

. In the preferred embodiment of the invention, a pair of **switches** in the form of relays are provided, and a logic circuit operates to power the...

#### **Claims:**

A device comprising: a sensor for sensing a condition in an environment;  
a **switch** , wherein said **switch** is **switched** when said condition being sensed **reaches** a selected threshold; a two-wire loop power supply,  
wherein the two-wire loop power supply powers said sensor and said **switch**  
and comprises a transmitter for transmitting information **indicative** of that which is sensed by said sensor; and a controller, connected to said sensor...

26/69,K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0011231145 - Drawing available

WPI ACC NO: 2002-170589/200222

XRPX Acc No: N2002-129744

**Micromechanical light steering device for optical switch , comprises ribbons having reflecting surface to impart arbitrary phase profile which**

**emulates tilting mirror, on light beam**

Patent Assignee: LIGHTCONNECT INC (LIGH-N)

Inventor: BLOOM D M; GODIL A A

**Patent Family** (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 6268952	B1	20010731	US 199892703	P	19980714	200222 B
			US 1999353122	A	19990714	

Priority Applications (no., kind, date): US 199892703 P 19980714; US 1999353122 A 19990714

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6268952	B1	EN	19	7	Related to Provisional US 199892703

#### Alerting Abstract US B1

NOVELTY - A support is arranged between silicon substrate (220) and each ribbon (210). The ribbons having reflecting surface are arranged parallel to each other. The ribbons controllably deflect towards the substrate, when a voltage difference is applied between substrate and ribbon. The reflecting surface imparts an arbitrary phase profile which emulates a tilting mirror, on the light beam.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.Micromechanical optical switch ;
- 2.Ribbon deflection controlling method .

USE - For optical **switches** used in optical networks.

ADVANTAGE - Optical **switch** deals directly with optical signals, possessing high **switching** speeds and enhances routing of wavelength division **multiplexing** (WDM) input signals.

DESCRIPTION OF DRAWINGS - The figure shows the operation of optical **switch** .

210 Ribbon

220 Silicon substrate

**Title Terms/Index Terms/Additional Words:** LIGHT; STEER; DEVICE; OPTICAL;

**SWITCH** ; COMPRISE; RIBBON; REFLECT; SURFACE; IMPART; ARBITRARY; PHASE; PROFILE; TILT; MIRROR; BEAM

## Class Codes

International Classification (Main): G02B-026/08

US Classification, Issued: 359291000, 359290000, 359247000, 359572000

File Segment: EngPI; EPI;

DWPI Class: V07; W01; W02; P81

Manual Codes (EPI/S-X): V07-G15; V07-K05; W01-A03E1; W01-A06C1; W02-C04A9

**Micromechanical light steering device for optical switch , comprises ribbons having reflecting surface to impart arbitrary phase profile which emulates tilting mirror, on...**

## Original Titles:

Micromechanical light steering optical switch ..

**Alerting Abstract ...Micromechanical optical switch ; Ribbon deflection controlling method .**

...

...USE - For optical switches used in optical networks.

...

...ADVANTAGE - Optical switch deals directly with optical signals, possessing high switching speeds and enhances routing of wavelength division multiplexing (WDM) input signals...

...DESCRIPTION OF DRAWINGS - The figure shows the operation of optical switch .

**Title Terms.../Index Terms/Additional Words: SWITCH ;**

## Original Publication Data by Authority

## Original Abstracts:

An optical switch uses a micromachined adjustable phase hologram device to route optical signals from an input fiber...

...range of phase profiles to route the light beams from the input fiber.

This optical switch is capable of dealing directly with optical signals, has fast switching speeds, is capable of routing WDM input signals, is polarization independent , is scalable to large switches , and avoids the complexity of other switches.



26/69,K/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0010115028 - Drawing available

WPI ACC NO: 2000-422567/200036

XRPX Acc No: N2000-315366

**Distributed high performance computer system architecture for online investment service, has secure resource layer with database to store customer information and electronic interface to national securities market**

Patent Assignee: E\*TRADE SECURITIES INC (ETRA-N)

Inventor: CHRAPATY D J; CIMA A L; FLEMING T P; MATTHYS L G; PAULO R S; TING

B L W

**Patent Family** (2 patents, 86 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2000028487	A2	20000518	WO 1999US26908	A	19991111	200036	B
AU 200016221	A	20000529	AU 200016221	A	19991111	200041	E

Priority Applications (no., kind, date): US 1998191471 A 19981112

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2000028487	A2	EN	29	2	

National Designated States,Original: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200016221 A EN Based on OPI patent WO 2000028487

#### Alerting Abstract WO A2

NOVELTY - A **gateway** service layer (14) providing secured communication with customers is connected to a scalable application service layer (16) which accepts customer transaction requests. The service request is executed by a stateless business transaction layer (18) and is passed to a secure resource layer (20). The resource layer has a database which supplies customer information and market access to layer (18).

DESCRIPTION - Several consumers simultaneously access the architecture using Internet browsers. The transaction requests are accepted from **gateway** services layer and the services layer prevents formatted response to the customer via **gateway** services layer. The transaction layer upon receiving transaction request executes the request according to predetermined business logic rules and return the results to

application  
services layer.

USE - For implementing online investment services for use in automatic teller machines, point-of-sale services and internet shopping.

ADVANTAGE - The four layers of the computer system architecture provide a scalable, manageable and flexible architecture. A secure communication is provided to several consumers using the **gateways** services layer. The relative **independence** of various layers allows **changes** and enhancements to be made to a layer without affecting or changing the remaining layers.

DESCRIPTION OF DRAWINGS - The figure shows schematic view of distributed high performance computer system architecture.

- 14 Flexible **gateway** services layer
- 16 Scalable application services layer
- 18 Stateless business transaction layer
- 20 Secure resource layer

**Title Terms/Index Terms/Additional Words:** DISTRIBUTE; HIGH; PERFORMANCE;  
COMPUTER; SYSTEM; ARCHITECTURE; INVESTMENT; SERVICE; SECURE; RESOURCE;  
LAYER; DATABASE; STORAGE; CUSTOMER; INFORMATION; ELECTRONIC; INTERFACE;  
NATION; MARKET

#### **Class Codes**

International Classification (Main): G07F

File Segment: EPI;

DWPI Class: T01; W01

Manual Codes (EPI/S-X): T01-H07C5E; T01-H07P; T01-J05A1; T01-J11C1;  
T01-M02A; W01-A06B7

**Alerting Abstract ...NOVELTY** - A **gateway** service layer (14) providing secured communication with customers is connected to a scalable application service...  
...Several consumers simultaneously access the architecture using Internet browsers. The transaction requests are accepted from **gateway** services layer and the services layer prevents formatted response to the customer via **gateway** services layer. The transaction layer upon receiving transaction request executes the request according to predetermined...

...scalable, manageable and flexible architecture. A secure communication is provided to several consumers using the **gateways** services layer. The relative **independence** of various layers allows **changes** and enhancements

to be made to a layer without affecting or changing the remaining layers...

...14 Flexible **gateway** services layer...

#### **Original Publication Data by Authority**

##### **Original Abstracts:**

...is provided for conducting global, online financial and informational transactions. The computer architecture includes four **independent** layers for ensuring a **scalable**, flexible system for **processing** customer transactions. A **gateways** services layer is **configured** to provide secure communications with a plurality of customers using a plurality of different access devices. An application services **layer** is connected to the **gateways** services layer and is configured to accept customer transaction requests and to present a formatted response to the customer via the **gateways** services layer. A **business** transactions layer is connected to the application services layer and is configured to receive customer...

26/69,K/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0009432833 - Drawing available

WPI ACC NO: 1999-371188/199931

XRPX Acc No: N1999-276745

**Voice-based Internet Protocol communications system**

Patent Assignee: BELL COMMUNICATIONS RES INC (BELL-N); TELCORDIA  
TECHNOLOGIES INC (TELC-N)

Inventor: ARANGO M; CAHL L; COOK M; COOK M J; ELY T C; HUITEMA C;  
OBROCK F;

SMYK D A

**Patent Family** (5 patents, 21 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 1999028827	A1	19990610	WO 1998US25760	A	19981203	199931	B
EP 1049981	A1	20001108	EP 1998960747	A	19981203	200062	E
			WO 1998US25760	A	19981203		
JP 2001525621	W	20011211	WO 1998US25760	A	19981203	200204	E
			JP 2000523608	A	19981203		
US 6724747	B1	20040420	US 199767224	P	19971203	200427	E
			US 1998205560	A	19981203		
CA 2312325	C	20041109	CA 2312325	A	19981203	200474	E
			WO 1998US25760	A	19981203		

Priority Applications (no., kind, date): US 1998205560 A 19981203; US  
199767224 P 19971203

**Patent Details**

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1999028827	A1	EN	121	18	
National Designated States,Original: CA JP					
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE					
IT LU MC NL PT SE					
EP 1049981	A1	EN			PCT Application WO 1998US25760 Based on OPI patent WO 1999028827
Regional Designated States,Original: DE FI FR GB IE IT SE					
JP 2001525621	W	JA	143		PCT Application WO 1998US25760 Based on OPI patent WO 1999028827
US 6724747	B1	EN			Related to Provisional US 199767224
CA 2312325	C	EN			PCT Application WO 1998US25760 Based on OPI patent WO 1999028827

**Alerting Abstract** WO A1

NOVELTY - A first media control device connects a first subscriber unit to a packet-based network. A second media control device connects a second subscriber unit to the packet-based network. A call agent includes a communication manager for managing communications between the first and second subscriber units over the network, and device for sending and/or receiving SS7 signaling information.

DESCRIPTION - An INDEPENDENT CLAIM is included for: a method of managing communications between first and second subscriber units over a

network.

USE - For managing media sessions for developing effective systems for implementing voice-based communications over packet-based networks, particularly voice over Internet Protocol (IP).

ADVANTAGE - Improves flexibility, scalability, and efficiency. of voice over packet-based network system

DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of the Internet **gateway** call server (IGCS) system according to the present invention.

**Title Terms/Index Terms/Additional Words:** VOICE; BASED; PROTOCOL; COMMUNICATE; SYSTEM

#### **Class Codes**

International Classification (Main): G06F-013/00, H04J-012/26, H04L-012/56

(Additional/Secondary): H04L-012/66, H04L-029/06, H04M-003/00

US Classification, Issued: 370352000

File Segment: EPI;

DWPI Class: T01; W01

Manual Codes (EPI/S-X): T01-H07C3A; T01-H07C5E; W01-A03B; W01-A06B7; W01-A06G2; W01-C02A7A; W01-C03; W01-C05

**Alerting Abstract** ...DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of the Internet **gateway** call server (IGCS) system according to the present invention.

#### **Original Publication Data by Authority**

#### **Original Abstracts:**

Methods and systems for a distributed **scalable** hardware **independent** system **that** supports **multiple** functions regarding management (186, 188) and support (182, 184) of communications over a packet-based...

...Methods and systems for a distributed **scalable** hardware **independent** system that supports multiple functions regarding **management** and **support** of communications over a packet-based network. The communications supported by these methods and systems...

...Methods and systems for a distributed **scalable** hardware **independent** system that supports multiple functions regarding management (186, 188) and support ( 182 , 184) **of** communications over a packet-based network. The communications supported by these methods and systems include...

#### **Claims:**

...long distance telephone service over a packet based network to telephone subscribers connected to circuit **switched** **switching** offices, said

system comprising a plurality of gateways including trunk gateways connecting the packet based network to individual ones of the switching offices, residential gateways connected to subscriber telephones, and SS7 gateways connected to individual ones of the switching offices, and a service control system including a plurality of call agent clusters, each of said gateways being connected to one of said call agent clusters, one of said call agent clusters serving as an ingress call agent cluster and another of said call agent...

...agent cluster associated with the called subscriber, said egress call agent cluster communicating to the gateway element associated with the called subscriber for establishing the connection over the packet based network.>

26/69,K/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0007285504

WPI ACC NO: 1995-344813/199544

XRPX Acc No: N1995-257693

**Object orientated architecture for network layout routing -  
distributing**

**function and system behaviour into autonomous router objects to make  
services and data normally external to object embedded or accessible  
within**

**object itself**

Patent Assignee: CABLETRON SYSTEMS INC (CABL-N)

Inventor: CORMIER L; DOBBINS K; HAGGERTY W; SIMONEAU P; SOCZEWSKI R;  
YOHE

K

**Patent Family** (7 patents, 20 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 1995026090	A1	19950928	WO 1995US3606	A	19950321	199544 B
AU 199521914	A	19951009	AU 199521914	A	19950321	199603 E
US 5509123	A	19960416	US 1994216541	A	19940322	199621 E
EP 752180	A1	19970108	EP 1995914816	A	19950321	199707 E
			WO 1995US3606	A	19950321	
AU 678109	B	19970515	AU 199521914	A	19950321	199728 E
JP 9506752	W	19970630	JP 1995524807	A	19950321	199736 E
			WO 1995US3606	A	19950321	
US 5951649	A	19990914	US 1994216541	A	19940322	199944 E
			US 1996611333	A	19960308	

Priority Applications (no., kind, date): US 1996611333 A 19960308; US  
1994216541 A 19940322

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1995026090	A1	EN	94	19	
National Designated States,Original: AU JP					
Regional Designated States,Original: AT BE CH DE DK ES FR GB GR IE IT LU					
MC NL PT SE					
AU 199521914	A	EN			Based on OPI patent WO 1995026090
US 5509123	A	EN	39	19	
EP 752180	A1	EN	1		PCT Application WO 1995US3606
Based on OPI patent WO 1995026090					
Regional Designated States,Original: AT BE CH DE DK ES FR GB GR IE IT LI					
LU MC NL PT SE					
AU 678109	B	EN			Previously issued patent AU
9521914					
Based on OPI patent WO 1995026090					
JP 9506752	W	JA	103		PCT Application WO 1995US3606
Based on OPI patent WO 1995026090					
US 5951649	A	EN			Continuation of application US
1994216541					Continuation of patent US 5509123

**Alerting Abstract** WO A1

The method of providing network routing services in a communications network involves initialising each **router** by instantiating a number of base objects in common to a number of interconnectivity protocols and technologies. Each base object is bound to one or more protocols or network interfaces to provide protocol specific bound objects.

In response to the arrival of a data packet at one of the **routers**, one of the protocol specific bound objects is called in order to service or forward the data packet.

USE/ADVANTAGE - Distributes critical functions and system behaviour into autonomous objects. Flexible and scalable architecture. Able to support variety of present and future architectures.

**Title Terms/Index Terms/Additional Words:** OBJECT; ORIENT; ARCHITECTURE; NETWORK; LAYOUT; ROUTE; DISTRIBUTE; FUNCTION; SYSTEM; BEHAVE; AUTONOMOUS;

**ROUTER** ; SERVICE; DATA; NORMAL; EXTERNAL; EMBED; ACCESS

**Class Codes**

International Classification (Main): G06F-013/14, G06F-015/17, H04L-012/00,

H04L-029/06

(Additional/Secondary): H04J-003/26, H04L-012/28, H04L-012/46, H04L-012/66

US Classification, Issued: 395200150, 395200100, 395200110, 395200120, 370060000, 370094100, 709238000, 370351000, 709250000

File Segment: EPI;

DWPI Class: T01; W01

Manual Codes (EPI/S-X): T01-F07; T01-J08C; W01-A06E1; W01-A06F

...distributing function and system behaviour into autonomous router objects to make services and data normally external to object embedded or accessible within object...

**Alerting Abstract** ...The method of providing network routing services in a communications network involves initialising each **router** by instantiating a number of base objects in common to a number of interconnectivity protocols...

...In response to the arrival of a data packet at one of the **routers**, one of the protocol specific bound objects is called in order to service or forward...

**Title Terms.../Index Terms/Additional Words:** **ROUTER** ;

**Original Publication Data by Authority**

**Original Abstracts:**



...architecture for network layer routing is provided which distributes function and system behavior into autonomous **router** objects. By distributing **these** functionalities into each object, the services and data normally external to the object are imbedded...

...by all objects of that class; (2) their own configuration information;  
(3) accessibility through a **router** resource object for **instantiation** and control; (4) automatic persistence in NVRAM; (5) remote management capabilities; and (6) text names...

...of the specific protocol or application. This ensures a common architecture among many different systems/ **router** components, a common **method** of control internally, a consistent order of instantiation and a common functional behavior...

...architecture for network layer routing is provided which distributes function and system behavior into autonomous **router** objects. By distributing these functionalities into each object, **the** services and data normally external to the object are imbedded or accessible within the object...

...by all objects of that class; (2) their own configuration information;  
(3) accessibility through a **router** resource object for instantiation and control; (4) automatic **persistence** in NVRAM; (5) remote management capabilities; and (6) text names for navigation of a resource...

...of the specific protocol or application. This ensures a common architecture among many different systems/ **router** components, a common method of control internally, a **consistent** order of instantiation and a common functional behavior...

...acts independently to process packets, yet each interacts together to collectively provide packet forwarding which is protocol independent, interface **independent** , and **scalable** .

...  
...architecture for network layer routing is provided which distributes function and system behavior into autonomous **router** objects. By distributing these functionalities into each object, the services and data normally external to the object are **imbedded** or accessible within the object itself. In another sense, some objects are distributed across the...

...by all objects of that class; (2) their own configuration information;  
(3) accessibility through a **router** resource object for instantiation and control; (4) automatic persistence in NVRAM; (5) remote management capabilities; and (6) text **names** for navigation of a resource tree as a

file system. These capabilities are in every...

...of the specific protocol or application. This ensures a common architecture among many different systems/ **router** components, a common method of control internally, a consistent order of instantiation and a common functional behavior.

**Claims:**

The method of providing network routing services in a communications network involves initialising each **router** by instantiating a number of base objects in common to a number of interconnectivity protocols...

...In response to the arrival of a data packet at one of the **routers** , one of the protocol specific bound objects is called in order to service or forward...

...and forwarding data packets, in a communications network including a plurality of interconnected multi-protocol **routers** , the **data** and methods for providing such services being united into fundamental logical

building blocks of classes and objects, the method comprising: providing a

**router** resource **object** class for instantiating an autonomous **router** object, **the router** object including data and methods for: a) routing and system functions for forwarding and servicing data packets...

...and control of network interfaces; and c) management of routing and system functions; initializing each **router** object **by** instantiating a plurality of base objects common to a number of interconnectivity protocols and technologies...

...bound objects; and in response to arrival of a data packet at one of the

**routers** , calling **one** of the protocol-specific bound objects in order to service or forward the data packet...

?

-

Set	Items	Description
S1	7696222	PACKET? OR FRAME? OR DATAGRAM? OR TRANSMI? OR DATA()FLOW? -
		OR DATAFLOW? OR FLOW??? OR TRAFFIC? OR NETWORKTRAFFIC? OR DAT-
		ABLOCK OR DATA() (BLOCK? OR BUNDL? OR UNIT? OR MESSAGE?)
S2	344482	S1(7N) (PLURAL? OR MULTI? OR SEVERAL OR MANY OR VARIE? OR G-
		ROUP? OR AGGREGAT?)
S3	1317225	S1:S2(7N) (MONITOR? OR INSPECT? OR DETECT? OR DETERMIN? OR -
		IDENT? OR EXAMIN? OR COMPAR? OR CHECK? OR ASSESS? OR ANALY? OR
		RECOGN? OR JUDG??? ?)
S4	6235	S1(5N) (NO OR "NOT" OR WITHOUT OR T) (2W) (AFFILIAT? OR ASSOC-
		IAT? OR BOUND? OR CONNECT? OR LINK? OR COOPERAT? OR CORRELAT?
		OR RELAT?)
S5	3690	S1(5N) (NO OR "NOT" OR WITHOUT OR T) (2W) (IDENT? OR RECOGN? -
		OR KNOW? ? OR COMBIN? OR CONJUNCT? OR PARTNER? OR COUPL?
		OR J-
		GIN? OR CORRESPOND? OR MATCH?)
S6	1025019	ROUTER? OR SWITCH? OR NETWORK()LAYER() (DEVICE? OR BRIDGE?)
		OR PATH()ADAPTER? OR LAYER(2W) (DEVICE? OR MECHANISM? OR APPAR-
		AT? OR SWITCH?)
S7	45422	GATEWAY? OR MULTI()HOME?()HOST? ? OR ROUTER() (SERVER? OR C-
		LUSTER?) OR ROUTING?()DEVICE? ? OR BROUTER?
S8	37142	(INQUIR? OR QUERY? OR QUERIE? ? OR REQUEST? OR ASK??? OR D-
		EMAND? OR SEEK???) (5N) (COMMAND? OR INSTRUCT? OR RULE? ? OR PR-
		OCEDUR? OR DIRECT?)
S9	961004	(SEPARAT? OR SINGLE? OR SINGULAR OR ONE OR INDIVIDUAL? OR -
		'RESPECTIVE? OR EACH OR INDEPEND? OR SEEMLESS?) (5N) (SCALAB? OR
		UPGRAD? OR INCREAS? OR DECREAS? OR EXPAND? OR GROW??? ? OR AD-
		APT? OR CHANG? OR MODIF?)
S10	0	S3 AND S4:S5 AND S8 AND S9
S11	0	S6:S7 AND (INDEPEND?(2W)SCALAB? OR S9) AND (FAILOVER? OR F-
		AIL()OVER?)
S12	0	S6:S7 AND S3 AND S4:S5 AND S8 AND S9
S13	823	S6:S7 AND S3 AND S9
S14	5	S13 AND S4:S5
S15	17890	S6:S7 AND (INDEPEND?(2W)SCALAB? OR S9)
S16	21	S15 AND S8
S17	1	S16 AND S3
S18	0	S16 AND S4:S5
S19	21	S16:S17
S20	9	S19 NOT (PY>2000 OR PY=2001:2007)

S21           6    RD (unique items)  
 File    2:INSPEC 1898-2007/Sep W1  
          (c) 2007 Institution of Electrical Engineers  
 File    6:NTIS 1964-2007/Sep W2  
          (c) 2007 NTIS, Intl Cpyrght All Rights Res  
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          (c) 2007 The HW Wilson Co.  
 File  111:TGG Natl.Newspaper Index(SM) 1979-2007/Aug 31  
          (c) 2007 The Gale Group  
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          (c) 2007 American Mathematical Society  
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          (c) 2007 Info.Sources Inc  
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          (c) 2006 The Thomson Corp  
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          (c) 2002 The Gale Group

14/5,K/1 (Item 1 from file: 2)  
 DIALOG(R)File 2:INSPEC  
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09001871 INSPEC Abstract Number: B2004-07-6210L-505, C2004-07-6130S-175

**Title: Advanced packet marking mechanism with pushback for IP traceback**

Author(s): Hyung-Woo Lee  
 Author Affiliation: Dept. of Software, Hanshin Univ., Osan, South Korea  
 Conference Title: Applied Cryptography and Network Security. Second International Conference, ACNS 2004. Proceedings (Lecture Notes in Comput. Sci. Vol.3089) p.426-38  
 Editor(s): Jakobsson, M.; Yung, M.; Zhou, J.  
 Publisher: Springer-Verlag, Berlin, Germany  
 Publication Date: 2004 Country of Publication: Germany xiv+510 pp.  
 ISBN: 3 540 22217 0 Material Identity Number: XX-2004-01325  
 Conference Title: Applied Cryptography and Network Security. Second International Conference, ACNS 2004. Proceedings  
 Conference Sponsor: Int. Commun. and Inf. Security Assoc  
 Conference Date: 8-11 June 2004 Conference Location: Yello Mountain, China  
 Language: English Document Type: Conference Paper (PA)  
 Treatment: Practical (P)  
 Abstract: Distributed denial-of-service (DDoS) attacks can be done by generating a large volume of traffic through spoofing the IP address of the target system. In response to such attacks, IP traceback technology has been proposed. The method identifies the source of a DDoS attack and restructures the path on the network through which the attacking packet has been transmitted. Existing traceback techniques marked path information on packets or generated **separate** traceback messages but they **increase** network load and cannot cope with DDoS attacks actively because they generate traceback information for arbitrary **packets without identifying** DDoS attacks. Thus this study proposed an improved marking technique that **identifies** DDoS **traffics** at **routers** by applying the pushback function and cope with DDoS attack packets efficiently. According to the result of experiments, the proposed technique reduced network load and improved traceback performance. (10 Refs).

Subfile: B C D  
Descriptors: computer crime; IP networks; telecommunication security  
Identifiers: hacking attacks; viruses; IP traceback packet marking  
mechanism; IP tracing pushback; distributed denial-of-service attacks;  
DDoS  
attacks; IP address spoofing; traceback information; path information  
marking  
Class Codes: B6210L (Computer communications); C6130S (Data  
security);  
C5620 (Computer networks and techniques); D1060 (Security aspects of  
IT)  
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...Abstract: attacking packet has been transmitted. Existing  
traceback  
techniques marked path information on packets or generated  
**separate**  
traceback messages but they **increase** network load and cannot cope  
with  
DDoS attacks actively because they generate traceback information  
for  
arbitrary **packets without identifying** DDoS attacks. Thus this  
study  
proposed an improved marking technique that **identifies** DDoS **traffics**  
at  
**routers** by applying the pushback function and cope with DDoS  
attack  
packets efficiently. According to the...

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DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
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12926633 Genuine Article#: BAH74 Number of References: 10  
**Title: Advanced packet marking mechanism with pushback for IP traceback**  
Author(s): Lee HW (REPRINT)  
Corporate Source: Hanshin Univ, Dept Software, Gyunggi 447791//South Korea/  
(REPRINT); Hanshin Univ, Dept Software, Gyunggi 447791//South Korea/(  
hwlee@hs.ac.kr)  
, 2004, V3089, P426-438  
ISSN: 0302-9743 Publication date: 20040000  
Publisher: SPRINGER-VERLAG BERLIN, HEIDELBERGER PLATZ 3, D-14197  
BERLIN,

GERMANYAPPLIED CRYPTOGRAPHY AND NETWORK SECURITY, PROCEEDINGS  
Series: LECTURE NOTES IN COMPUTER SCIENCE  
Language: English Document Type: ARTICLE  
Geographic Location: South Korea  
Journal Subject Category: COMPUTER SCIENCE, THEORY & METHODS  
Abstract: Distributed Denial-of-Service(DDoS) attack can be done by  
generating a large volume of traffic through spoofing the IP  
address of  
the target system. In response to such attacks, IP traceback  
technology  
has been proposed. The method identifies the source of a DDoS  
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attacking  
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path  
information on packets or generated **separate** traceback messages  
but  
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actively  
because they generate traceback information for arbitrary **packets**  
**without identifying** DDoS attacks. Thus this study proposed an  
improved marking technique that **identifies** DDoS **traffics** at  
**routers** by applying the pushback function and cope with DDoS  
attack  
packets efficiently. According to the result of experiments, the  
proposed technique reduced network load and improved traceback  
performance.(1).

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GARBER L, 2000, V33, P12, COMPUTER  
PARK K, 2001, P338, P IEEE INFOCOM 2001  
SONG D, 2001, V2, P878, P IEEE INFOCOM

...Abstract: attacking packet has been transmitted. Existing traceback

techniques marked path information on packets or generated  
**separate**  
traceback messages but they **increase** network load and cannot cope  
with DDoS attacks actively because they generate traceback  
information  
for arbitrary **packets** **without** **identifying** DDoS attacks. Thus  
this  
study proposed an improved marking technique that **identifies** DDoS  
**traffics** at **routers** by applying the pushback function and cope  
with  
DDoS attack packets efficiently. According to the...



14/5,K/3 (Item 1 from file: 35)  
DIALOG(R)File 35:Dissertation Abs Online  
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01347880 ORDER NO: AAD92-39714

**RIBOSOMAL FRAMESHIFTING IN THE ARG1 GENE OF ESCHERICHIA COLI**

Author: FU, CHANGWEI

Degree: PH.D.

Year: 1991

Corporate Source/Institution: SOUTHERN ILLINOIS UNIVERSITY AT  
CARBONDALE  
(0209)

Major Professor: JACK PARKER

Source: VOLUME 53/08-B OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 3908. 168 PAGES

Descriptors: BIOLOGY, GENETICS; BIOLOGY, MICROBIOLOGY; BIOLOGY,  
MOLECULAR

Descriptor Codes: 0369; 0410; 0307

The efforts of this laboratory have been directed to understanding codon mistranslation, concentrating on missense and frameshifting errors.

Previous studies on mistranslation of phenylalanine (Phe) codons in the argI gene of E. coli have revealed unique features. The argI gene encodes

ornithine transcarbamylase (OTC) and has the Phe codon UUU at position 3

and the Phe codon UUC at position 8. Experiments demonstrated that both codons directed the misincorporation of leucine (Leu) at a high frequency

at position 8 during Phe starvation while neither Phe codon directed misincorporation of Leu at position 3 in the same situation (Parker and Precup, 1986; Precup et al., 1989). In this study, we have used several approaches to further investigate mistranslation of the Phe codons of the

argI gene. These approaches include changing the context and **switching** codons 2, 3, 4 with codons 7, 8, 9, in the argI gene. We also constructed a

**frameshifting detection** system to study potential ribosomal **frameshifting** in the argI gene. The following conclusions can be made:

(1)

a **one base change** in the argI gene, which resulted in a change from a

rarely used Gly codon (GGG) to a frequently used Gly codon at position 2,

triggers the Leu substitution for Phe at codon position 3 of the argI gene

indicating that the mistranslation errors may be correlated with the speed

of the ribosome movement; (2) ribosomal frameshifting may occur at a frequency of 3 to 19 percent at position 3 of the argI gene without Phe starvation; and (3) missense errors and frameshifting may occur at the same

codon. The ribosomal frameshift in argI is the first frameshift error ever

investigated in this detail. Previously investigated ribosomal frameshifts

have been required events for gene expression.

The coat protein gene of bacteriophage MS2 has four Phe codons and a dramatic decrease of the coat protein production had been noticed during the Phe starvation (Parker and Precup, 1986). It seemed possible that frameshifting was involved. However, experiments reported here, using a coat-lacZ fusion construct, lead to the conclusion that the absence of the coat protein during Phe starvation was **not** be **correlated** to ribosomal **frameshifting** .

...of the Phe codons of the argI gene. These approaches include changing the context and **switching** codons 2, 3, 4 with codons 7, 8, 9, in the argI gene. We also constructed a **frameshifting detection** system to study potential ribosomal **frameshifting** in the argI gene. The following conclusions can be made: (1) a **one** base **change** in the argI gene, which resulted in a change from a rarely used Gly codon...

...lead to the conclusion that the absence of the coat protein during Phe starvation was **not** be **correlated** to ribosomal **frameshifting** .

14/5,K/4 (Item 2 from file: 35)  
DIALOG(R)File 35:Dissertation Abs Online  
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949733 ORDER NO: AAD87-07633

**CONCURRENT COMMUNICATION AMONG MULTI-TRANSCIVER STATIONS OVER SHARED MEDIA**

**(COMPUTER NETWORKS, SPREAD SPECTRUM)**

Author: BIRK, YITZHAK

Degree: PH.D.

Year: 1987

Corporate Source/Institution: STANFORD UNIVERSITY (0212)

Source: VOLUME 47/12-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 4997. 225 PAGES

Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL

Descriptor Codes: 0544

Presently, most local-area networks employ a single broadcast bus to interconnect **single** -transceiver stations. In order to **increase** a network's throughput beyond a single bus's data rate without using dedicated **switching** nodes, multiple buses and multi-transceiver stations are required. We explore the design space of single-hop interconnections among such stations; i.e., interconnections that provide a passive transmission path between any two stations. For example, we present interconnections whose throughput can grow quadratically with the number of transmitters and receivers per station. They consist of a collection of buses, each of which interconnects only a proper subset of the stations using one of their transceivers. Yet, for any two stations, there is at least one bus to which they are both connected. We refer to these as selective-broadcast interconnections, or SBI's. The use of unidirectional media significantly enriches the design space of SBI's since, unlike with bidirectional media, the sets of receivers that hear two **transmissions** need **not** be **identical** or disjoint. A graph-theoretic criterion for **determining** whether or not **transmissions** over a specified pair of paths would interfere with each other is established. It is then used in studying the performance of various SBI's. Implementation-related issues, such as power budget in fiber optic implementations, are discussed in the context of local-area networks. Lastly, the concept of SBI's is shown to also apply to memory-processor interconnection, as well as to additional domains.

A spread-spectrum channel can accommodate several concurrent successful transmissions, and a single-transceiver node can thus utilize only a small fraction of the channel's capacity. In order to allocate the appropriate fraction of capacity to a "busy" node, we propose to equip it

with several transmitters and receivers, thereby turning it into a "supernode". Several architectures and operation policies for supernodes are suggested and compared; it is shown that a supernode can significantly outperform a collection of independent conventional nodes with the same total numbers of transmitters and receivers. Packet-radio networks with half-duplex nodes, as well as networks with full-duplex nodes, are considered.

Presently, most local-area networks employ a single broadcast bus to interconnect **single** -transceiver stations. In order to **increase** a network's throughput beyond a single bus's data rate without using dedicated **switching** nodes, multiple buses and multi-transceiver stations are required. We explore the design space of...

...of SBI's since, unlike with bidirectional media, the sets of receivers that hear two **transmissions** need **not** be **identical** or disjoint. A graph-theoretic criterion for **determining** whether or not **transmissions** over a specified pair of paths would interfere with each other is established. It is...

14/5,K/5 (Item 1 from file: 144)  
DIALOG(R) File 144:Pascal  
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16650518 PASCAL No.: 04-0301420  
**Advanced packet marking mechanism with pushback for IP traceback**  
**ACNS 2004 : applied cryptography and network security : Yellow**  
**Mountain,**

**8-11 June 2004**

LEE Hyung-Woo  
JAKOBSSON Markus, ed; YUNG Moti, ed; ZHOU Jianying, ed  
Dept. of Software, Hanshin University, Osan, Gyunggi, 447-791, Korea,  
Republic of

Applied cryptography and network security. International conference,  
2 (

yellow Mountain CHN) 2004-06-08

Journal: Lecture notes in computer science, 2004, 3089 426-438  
ISBN: 3-540-22217-0 ISSN: 0302-9743 Availability: INIST-16343;  
354000117889170310

No. of Refs.: 10 ref.

Document Type: P (Serial); C (Conference Proceedings) ; A (Analytic)

Country of Publication: Germany

Language: English

Distributed Denial-of-Service(DDoS) attack can be done by  
generating a  
large volume of traffic through spoofing the IP address of the  
target  
system. In response to such attacks, IP traceback technology has  
been  
proposed. The method identifies the source of a DDoS attack  
and  
restructures the path on the network through which the attacking packet  
has  
been transmitted. Existing traceback techniques marked path  
information on  
packets or generated **separate** traceback messages but they  
**increase**  
network load and cannot cope with DDoS attacks actively because  
they  
generate traceback information for arbitrary **packets**  
**without**  
**identifying** DDoS attacks. Thus this study proposed an improved  
marking  
technique that **identifies** DDoS **traffics** at **routers** by applying  
the  
pushback function and cope with DDoS attack packets efficiently.  
According  
to the result of experiments, the proposed technique reduced network  
load  
and improved traceback performance. SUP 1

English Descriptors: Internet protocol; Denial of service; Safety;  
Marking;  
Traceability; **Router** ; Attacking

French Descriptors: Protocole internet; Deni service; Securite;  
Reperage;

Tracabilite; Routeur; Attaque

Classification Codes: 001D02B07C

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... attacking packet has been transmitted. Existing traceback techniques marked path information on packets or generated **separate** traceback messages but they **increase** network load and cannot cope with DDoS attacks actively because they generate traceback information for arbitrary **packets without identifying** DDoS attacks. Thus this study proposed an improved marking technique that **identifies** DDoS **traffics** at **routers** by applying the pushback function and cope with DDoS attack packets efficiently. According to the...

English Descriptors: Internet protocol; Denial of service; Safety; Marking; Traceability; **Router** ; Attacking

Spanish Descriptors: Protocolo internet; Denegacion de servicio; Seguridad; Marcacion; Rastreabilidad; **Router** ; Ataque

21/7/1 (Item 1 from file: 2)

DIALOG(R) File 2:INSPEC

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06009580 INSPEC Abstract Number: A9516-4260F-015, B9509-6260-053

**Title: Push-pull multi-gigabit/s modulated DFB lasers with low chirp and high cut-off frequency**

Author(s): Nowell, M.C.; Carroll, J.E.; Zhang, L.M.

Author Affiliation: Dept. of Eng., Cambridge Univ., UK

Conference Title: CLEO '94. Summaries of Papers Presented at the Conference on Lasers and Electro-Optics. Vol.8. 1994 Technical Digest

Series. Conference Edition (Cat. No.94CH3463-7) p.238

Publisher: Opt. Soc. America, Washington, DC, USA

Publication Date: 1994 Country of Publication: USA xvi+448 pp.

ISBN: 0 7803 1971 0

Conference Title: Proceedings of 1994 Conference on Lasers and

Electro-Optics and The International Electronics Conference CLEO/IQEC

Conference Sponsor: Opt. Soc. America; IEEE/Lasers & Electro-Optics Soc;

Eur. Phys. Soc. Quantum Electron. Div.; Japanese Quantum Electron. Joint Group

Conference Date: 8-13 May 1994 Conference Location: Anaheim, CA, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Experimental (X)

Abstract: Summary form only given. Long haul communication systems at multigigabit/s rates need low chirp transmitters to minimize dispersion penalties. In this paper, **direct ASK** modulation of a laser is discussed using a method which overcomes many drawbacks of external modulation while providing good contrast and low chirp at high bit rates. The basis for these excellent results is "push-pull" modulation of a two-contact distributed feedback (DFB) laser. **Increasing** the current into **one** contact is compensated by **decreasing** the current to the other by an equal amount. Symmetry in the device with asymmetry in modulation ensures that net **increases** in electron density in **one** section are compensated by net **decreases** in the other, insensitive of mean bias level. This symmetry ensures that both on and off signal states have equal optical frequencies with a complementary optical output from the alternative facet.

(3 Refs)

Subfile: A B  
Copyright 1995, IEE



21/7/2 (Item 2 from file: 2)  
DIALOG(R) File 2:INSPEC  
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05245205 INSPEC Abstract Number: A9221-3320-004

**Title: Characterization and improvements of presumptive molecular switch**

**molecules**

Author(s): Broo, A.; Hagen, S.  
Author Affiliation: Dept. of Quantum Chem., Uppsala Univ., Sweden  
Journal: Chemical Physics Letters vol.196, no.3-4 p.239-44  
Publication Date: 14 Aug. 1992 Country of Publication: Netherlands  
CODEN: CHPLBC ISSN: 0009-2614  
U.S. Copyright Clearance Center Code: 0009-2614/92/\$05.00  
Language: English Document Type: Journal Paper (JP)  
Treatment: Theoretical (T); Experimental (X)  
Abstract: Organic donor-bridge-acceptor (D-B-A) molecules are studied using experimental and theoretical methods. Solvatochromic shifts of the spectra for both series of molecules were interpreted using a Lippert analysis. In the conjugated D-B-A systems the charge separation upon excitation is found to be about 30%-40%. In the nonconjugated molecules the charge separation was only about 7%-14%. quantum-chemical calculations of spectra and geometry for some not yet synthesized molecules were performed in order to **seek** to **increase** the amount of **direct** charge **separation** upon excitation. (7 Refs)  
Subfile: A

21/7/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

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02750216 INSPEC Abstract Number: B81047603

**Title: An efficient procedure for scheduling packets in a multibeam satellite-switched TDMA system**

Author(s): Stern, T.E.; Gadre, J.; Smith, D.R.

Author Affiliation: Dept. of Electrical Engng., Columbia Univ., New York, NY, USA

Conference Title: Fifth International Conference on Digital Satellite

Communications p.27-34

Publisher: IEEE, New York, NY, USA

Publication Date: 1981 Country of Publication: USA xxii+482 pp.

Conference Sponsor: IEEE; Int. Telecommun. Satellite Organ.; et al

Conference Date: 23-26 March 1981 Conference Location: Genoa,

Italy

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: A satellite **switched** multi-beam system using  $N/\text{sub } T/$  transponders is considered, in which a large number of ground stations are distributed over  $N/\text{sub } Z/(>\text{or}=N/\text{sub } T/)$  zones. Each station transmits information digitally in a packet- **switched** time division multiple access (TDMA) mode, with all packets of fixed length. A **demand** assigned packet scheduling **procedure** is described which achieves high throughput with relatively low average time delay, **adapts** easily to fluctuating demand from **individual** earth stations, and automatically schedules transmissions to avoid adjacent zone interference. (10 Refs)  
Subfile: B

21/7/4 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
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02305245 Genuine Article#: KR821 Number of References: 31

**Title: READING IN PURE ALEXIA - THE EFFECT OF STRATEGY**

Author(s): COSLETT HB; SAFFRAN EM; GREENBAUM S; SCHWARTZ H

Corporate Source: TEMPLE UNIV HOSP & MED SCH, DEPT NEUROL, BROAD & ONTARIO

ST/PHILADELPHIA//PA/19140; TEMPLE UNIV, DEPT  
PSYCHIAT/PHILADELPHIA//PA/19122; MOSS REHABIL  
HOSP/PHILADELPHIA//PA/19141; TEMPLE UNIV, DEPT  
NEUROL/PHILADELPHIA//PA/19122; TEMPLE UNIV, DEPT SPEECH LANGUAGE  
HEARING/PHILADELPHIA//PA/19122

Journal: BRAIN, 1993, V116, FEB (FEB), P21-37

ISSN: 0006-8950

Language: ENGLISH Document Type: ARTICLE

Abstract: A number of investigators have demonstrated that patients with

pure alexia comprehend briefly presented words which they are unable to

explicitly identify. We suggested previously that these patients may

read by means of two distinct procedures: a laborious letter-by-letter

method and a 'whole-word' procedure which, at least initially, does not

support explicit word identification. We report a test of this proposal

in a patient with pure alexia. We reasoned that if the patient had access to two distinct and incompatible procedures, he might be induced

to **switch** from **one** to the other by **changing** task **demands** .

We

found that when **instructed** to name words, the patient employed a letter-by-letter strategy; in contrast, when instructed to make lexical

decision or semantic judgements about rapidly presented words, he appeared to use a 'whole-word' strategy. These data support the hypothesis that two distinct procedures are available to this patient.

We argue, further, that it is necessary to suppress use of the letter-by-letter strategy to demonstrate whole word reading capability

in pure alexics, and that failure to do so may account for negative findings in other cases reported in the literature.

21/7/5 (Item 1 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

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01671754 ORDER NO: AAD99-08617

**THE INTERACTION BETWEEN LEARNING STYLE AND GRAMMAR INSTRUCTION FOR KOREAN**

**STUDENTS OF ENGLISH AS A FOREIGN LANGUAGE**

Author: LEE, KANGSUB

Degree: PH.D.

Year: 1998

Corporate Source/Institution: UNIVERSITY OF GEORGIA (0077)

Director: DONALD L. RUBIN

Source: VOLUME 59/10-A OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 3720. 245 PAGES

This study extended earlier studies regarding the effects of interactive small group grammar tasks as opposed to traditional teacher-fronted grammar lessons. In particular, it investigated the effects

of individual learning styles on students' achievement via the two instructional methods.

Eighty four Korean students with intermediate level of English proficiency were each administered a Korean version of the Learning Style

Profile, a battery which was developed by the National Association of Secondary School Principals. The students were randomly assigned to one of

three groups. In the first cycle of a grammar treatment, one group received

instruction in a particular grammatical construction via a teacher-fronted

lesson. The second group received instruction in the same grammatical construction via an interactive grammar task. The nongrammar group performed typical communicative activities. In a second cycle of grammar

treatment, the two experimental groups **switched** instructional methods and

received instruction in a second target grammatical construction. All groups took three pre- and posttests on the target structures. Outcome measures included a grammaticality judgment test, a sentence combining test, and a measure of stimulated sentence production of the target features. In addition, at the conclusion of the interventions, participants

completed a questionnaire which **asked** for general attitudes toward the

**instructional** methods.

A repeated-measures ANCOVA was used to investigate any overall advantage of one instructional method over the other. **Separate** McNemer

tests for **change** scores on **each** outcome measure tested whether some students achieved greater gains or more positive attitudes under one method

rather than the other. Aptitude by treatment interaction analyses examined

the match or mismatch of learning styles with the two methods of grammar

instruction. Discriminant analysis investigated whether differential superiority for one teaching method or the other was predicted by elements of learning style. Separate regressions were run to investigate whether the amount of verbal negotiations in the grammar task exercises predicted achievement on the language proficiency measures.

Results based on comparisons of the proficiency gains produced by the grammar task treatment with the gains produced by the nongrammar treatment indicated that there was significant difference in favor of the grammar task activities. The results of the McNemer test for sentence combining tests showed that the number of superior grammar task learners was significantly greater than the number of superior grammar lesson learners. Learning style preferences were able to predict more than 70% of the participants with respect to which instructional method worked best for them. In addition, aptitude by treatment interaction analyses showed that visual learning style is best accommodated by traditional teacher-fronted grammar lessons. Finally, this study showed that number of negotiation did not predict learning from grammar task exercises.

In sum, these findings indicate that formal grammar instruction is facilitated when there is a match between the instructional method and the learners' learning style.

21/7/6 (Item 2 from file: 35)  
DIALOG(R) File 35:Dissertation Abs Online  
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01630943 ORDER NO: AAD98-25166

**EXTENDING EDUCATIONAL COMMUNICATION: THE EXPERIENCE OF DISTANCE  
LEARNING**

**VIA A DISTRIBUTIVE ENVIRONMENT FOR COLLABORATION AND LEARNING  
(COMPUTER  
MEDIATED COMMUNICATION)**

Author: BARRITT, MATTHEW DAVID

Degree: PH.D.

Year: 1998

Corporate Source/Institution: THE UNIVERSITY OF MICHIGAN (0127)

Chair: FREDERICK L. GOODMAN

Source: VOLUME 59/02-A OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 461. 266 PAGES

The exploration of new educational communication structures which make use of Computer-Mediated Communication (CMC) environments to support local and distance education and to allow the dispersion of learning outside of conventional contexts presents the educational community with both opportunities and dangers. The movement toward these new structures may not represent a simple **switch** of mechanisms but instead may represent profound change in the nature of the educational experience and the **demands** placed on students, **instructors**, and institutions.

This research explores the experience of a pilot implementation of a CMC course structure called the Distributive Environment for Collaboration and Learning (DECAL). DECAL combines synchronous face-to-face classroom interaction (either conventional or technology-mediated) with asynchronous Web-based interaction and resources. In DECAL's mixed-mode, synchronous/asynchronous communication model **each** structure supports **increased** interaction in the other and applies to local as well as distance educational contexts.

The DECAL pilot was studied qualitatively using a modified ethnographic evaluation methodology based on interviews, thematic analysis, and case-study style reporting. It implemented an eight-week executive education style business course taught entirely at a distance by university faculty to executives in a global corporation located in another country. The results of the pilot were unexpected and dramatic and forced the focus of the research away from the DECAL model and towards issues of cross-institutional partnership in education, integration of CMC-based education into the work environment, the personal and organizational complexities of CMC-based education, and the effects of computer mediated communication on control, authority roles, and community formation in

an  
educational context.

The learnings of the research were extremely rich and highlight the danger of assumptions in the design, development, and deployment of cross-institutional CMC-based distance education. In one sense CMC-based education is different from conventional education and needs to be approached as a new context, not as a simple change in mechanism. But in another sense the issues highlighted here are the same issues conventional education has struggled with for centuries; communication, interaction and cohort formation, productive control and authority relationships, and responsibility for learning. The results of this research support further development and testing of the DECAL model.

# STIC EIC 2100 236981

## Search Request Form

Today's Date: 09/10/2007

What date would you like to use to limit the search?

Priority Date: 03/21/2000 Other:

Name Yemane M. Gerezgihet

AU 2144 Examiner # 7985

Room # 4C71 Phone 23927

Serial # 09/814,415

Format for Search Results (Circle One):

PAPER DISK EMAIL Both

Where have you searched so far?

USP DWPI EPO JPO ACM IBM TDB

IEEE INSPEC SPI Other

Is this a "Fast & Focused" Search Request? (Circle One) YES NO

A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2100 and on the EIC2100 NPL Web Page at <http://ptoweb/patents/stic/stic-tc2100.htm>.

What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found.

Is this request for a BOARD of APPEALS case? (Circle One) YES NO

Is this case a SPECIAL CASE? (Circle One) YES NO

Novelty: A switch component analyzing plurality of data flow, and when a flow is not associated with a requested resource requesting instructions from a control component; the control component instructing the switch on how to handle the unassociated flow and where the capacity of the switch and the control component is independently scalable by changing the capacity by one or more of the switch and control components...

STIC Searcher BMims

Phone 2-3528

Date picked up 9/11/07

Date Completed 9/11/07



# STIC Search Results Feedback Form

**EIC 2100**

Questions about the scope or the results of the search? Contact *the EIC searcher or contact:*

Alyson Dill, EIC 2100 Team Leader  
272-3527, RND 4B28

## Voluntary Results Feedback Form

➤ I am an examiner in Workgroup:  Example: 2133

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(Journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

**Comments:**

Drop off or send completed forms to STIC/EIC2100 RND, 4B28

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S1	5042666	PACKET? OR FRAME? OR DATAGRAM? OR TRANSMI? OR DATA()FLOW? - OR DATAFLOW? OR FLOW??? OR TRAFFIC? OR NETWORKTRAFFIC? OR DAT- ABLOCK OR DATA() (BLOCK? OR BUNDL? OR UNIT? OR MESSAGE?)
S2	324436	S1(7N) (PLURAL? OR MULTI? OR SEVERAL OR MANY OR VARIE? OR G- ROUP? OR AGGREGAT? OR VARIOUS)
S3	457977	S1:S2(5N) (MONITOR? OR INSPECT? OR DETECT? OR DETERMIN? OR - IDENT? OR EXAMIN? OR COMPAR? OR CHECK? OR ASSESS? OR ANALY? OR RECOGN?)
S4	5841	S1(5N) (NO OR "NOT" OR WITHOUT OR T) (2W) (AFFILIAT? OR ASSOC- IAT? OR BOUND? OR CONNECT? OR LINK? OR COOPERAT? OR CORRELAT? OR RELAT?)
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S6	22303	GATEWAY? OR MULTI()HOME?()HOST? ? OR ROUTER() (SERVER? OR C- LUSTER?) OR ROUTING?()DEVICE? ? OR BROUTER?
S7	1560065	ROUTER? OR SWITCH? OR NETWORK()LAYER() (DEVICE? OR BRIDGE?) OR PATH()ADAPTER? OR LAYER(2W) (DEVICE? OR MECHANISM? OR APPAR- AT? OR SWITCH?)
S8	30634	(INQUIR? OR QUERY? OR QUERIE? ? OR REQUEST? OR ASK??? OR D- EMAND? OR SEEK???) (5N) (COMMAND? OR INSTRUCT? OR RULE? ? OR PR- OCEDUR? OR DIRECT?)
S9	487881	(SEPARAT? OR SINGLE? OR SINGULAR OR ONE OR INDIVIDUAL? OR - RESPECTIVE? OR EACH OR INDEPEND? OR SEEMLESS?) (5N) (SCALAB? OR UPGRAD? OR INCREAS? OR DECREAS? OR EXPAND? OR GROW??? ? OR AD- APT? OR CHANG? OR MODIF?)
S10	88	S3 AND S4:S5 AND S8
S11	19	S10 AND S6:S7
S12	2	S11 AND S9
S13	48344	S6:S7 AND S9
S14	12	S13 AND INDEPEND?(2W) SCALABL?
S15	5	S14 AND S3
S16	5	S15 NOT S12
S17	3761	S13 AND S3
S18	2	S17 AND S4:S5 AND S8
S19	2	S18 NOT S16
S20	0	S19 NOT S12
S21	19	S6:S7 AND S3 AND S4:S5 AND S8
S22	34	S13 AND (FAILOVER? OR FAIL()OVER?)
S23	0	S22 AND INDEPEND?(2W) SCALABL?
S24	34	S22 AND S9
S25	7	S12 OR S15:S16 OR S18:S19
S26	7	S14 NOT S25
S27	34	S24 NOT S25:S26
S28	24	S27 AND AC=US/PR AND AY=(2001:2007)/PR
S29	25	S27 AND AC=US AND AY=2001:2007
S30	25	S27 AND AC=US AND AY=(2001:2007)/PR
S31	34	S27 AND PY=2001:2007
S32	34	S28:S31
S33	0	S27 NOT S32

File 350:Derwent WPIX 1963-2007/UD=200756

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File 347:JAPIO Dec 1976-2007/Mar(Updated 070809)

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Set	Items	Description
S1	1461553	PACKET? OR FRAME? OR DATAGRAM? OR TRANSMI? OR DATA()FLOW? - OR DATAFLOW? OR FLOW??? OR TRAFFIC? OR NETWORKTRAFFIC? OR DAT- ABLOCK OR DATA() (BLOCK? OR BUNDL? OR UNIT? OR MESSAGE?)
S2	221924	S1(7N) (PLURAL? OR MULTI? OR SEVERAL OR MANY OR VARIE? OR G- ROUP? OR AGGREGAT?)
S3	318246	S1:S2(7N) (MONITOR? OR INSPECT? OR DETECT? OR DETERMIN? OR - IDENT? OR EXAMIN? OR COMPAR? OR CHECK? OR ASSESS? OR ANALY? OR RECOGN? OR JUDG??? ?)
S4	9103	S1(5N) (NO OR "NOT" OR WITHOUT OR T) (2W) (AFFILIAT? OR ASSOC- IAT? OR BOUND? OR CONNECT? OR LINK? OR COOPERAT? OR CORRELAT? OR RELAT?)
S5	11239	S1(5N) (NO OR "NOT" OR WITHOUT OR T) (2W) (IDENT? OR RECOGN? - OR KNOW? ? OR COMBIN? OR CONJUNCT? OR PARTNER? OR COUPL? OR J- OIN? OR CORRESPOND? OR MATCH?)
S6	498118	ROUTER? OR SWITCH? OR NETWORK()LAYER() (DEVICE? OR BRIDGE?) OR PATH()ADAPTER? OR LAYER(2W) (DEVICE? OR MECHANISM? OR APPAR- AT? OR SWITCH?)
S7	38654	GATEWAY? OR MULTI()HOME?()HOST? ? OR ROUTER() (SERVER? OR C- LUSTER?) OR ROUTING?()DEVICE? ? OR BROUTER?
S8	53073	(INQUIR? OR QUERY? OR QUERIE? ? OR REQUEST? OR ASK??? OR D- EMAND? OR SEEK???) (5N) (COMMAND? OR INSTRUCT? OR RULE? ? OR PR- OCEBUR? OR DIRECT?)
S9	656758	(SEPARAT? OR SINGLE? OR SINGULAR OR ONE OR INDIVIDUAL? OR - RESPECTIVE? OR EACH OR INDEPEND? OR SEEMLESS?) (5N) (SCALAB? OR UPGRAD? OR INCREAS? OR DECREAS? OR EXPAND? OR GROW??? ? OR AD- APT? OR CHANG? OR MODIF?)
S10	122	S3(100N)S4:S5(100N)S8
S11	11	S10(100N)S9
S12	61	S6:S7(100N)S4:S5(100N)S8
S13	26	S12(100N)S3
S14	4	S13(100N)S9
S15	165	S10 OR S12
S16	0	S15(100N) (FAILOVER? OR FAIL()OVER?)
S17	0	S15(100N)INDEPEND?(2W)SCALABL?
S18	109	S6:S7(100N) (INDEPEND?(2W)SCALABL? OR S9) (100N) (FAILOVER? OR FAIL()OVER?)
S19	0	S18(100N)S3(100N)S4:S5
S20	0	S18(100N)S4:S5
S21	18	S18(100N)S3
S22	18	S21 NOT S11
S23	1	S14 NOT S11
S24	19	S22:S23
S25	4	S24 NOT (AD>2000 OR AD=2001:2007)
S26	109	S6:S7(100N) (INDEPEND?(2W)SCALAB? OR S9) (100N) (FAILOVER? OR FAIL()OVER?)
S27	3	S26(100N) (CONTROL?(2N) (COMPONENT? OR UNIT? ?) OR FLOW?(2N)- (ANALY? OR MONIT?))
S28	30	S11 OR S14 OR S24
S29	1	S27 NOT S28

File 348:EUROPEAN PATENTS 1978-2007/ 200735

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File 349:PCT FULLTEXT 1979-2007/UB=20070823UT=20070816

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Set	Items	Description
S1	7696222	PACKET? OR FRAME? OR DATAGRAM? OR TRANSMI? OR DATA()FLOW? - OR DATAFLOW? OR FLOW??? OR TRAFFIC? OR NETWORKTRAFFIC? OR DAT- ABLOCK OR DATA() (BLOCK? OR BUNDL? OR UNIT? OR MESSAGE?)
S2	344482	S1(7N) (PLURAL? OR MULTI? OR SEVERAL OR MANY OR VARIE? OR G- ROUP? OR AGGREGAT?)
S3	1317225	S1:S2(7N) (MONITOR? OR INSPECT? OR DETECT? OR DETERMIN? OR - IDENT? OR EXAMIN? OR COMPAR? OR CHECK? OR ASSESS? OR ANALY? OR RECOGN? OR JUDG??? ?)
S4	6235	S1(5N) (NO OR "NOT" OR WITHOUT OR T) (2W) (AFFILIAT? OR ASSOC- IAT? OR BOUND? OR CONNECT? OR LINK? OR COOPERAT? OR CORRELAT? OR RELAT?)
S5	3690	S1(5N) (NO OR "NOT" OR WITHOUT OR T) (2W) (IDENT? OR RECOGN? - OR KNOW? ? OR COMBIN? OR CONJUNCT? OR PARTNER? OR COUPL? OR J- OIN? OR CORRESPOND? OR MATCH?)
S6	1025019	ROUTER? OR SWITCH? OR NETWORK()LAYER() (DEVICE? OR BRIDGE?) OR PATH()ADAPTER? OR LAYER(2W) (DEVICE? OR MECHANISM? OR APPAR- AT? OR SWITCH?)
S7	45422	GATEWAY? OR MULTI()HOME?()HOST? ? OR ROUTER() (SERVER? OR C- LUSTER?) OR ROUTING?()DEVICE? ? OR BROUTER?
S8	37142	(INQUIR? OR QUERY? OR QUERIE? ? OR REQUEST? OR ASK??? OR D- EMAND? OR SEEK??? (5N) (COMMAND? OR INSTRUCT? OR RULE? ? OR PR- OCEDUR? OR DIRECT?)
S9	961004	(SEPARAT? OR SINGLE? OR SINGULAR OR ONE OR INDIVIDUAL? OR - RESPECTIVE? OR EACH OR INDEPEND? OR SEEMLESS?) (5N) (SCALAB? OR UPGRAD? OR INCREAS? OR DECREAS? OR EXPAND? OR GROW??? ? OR AD- APT? OR CHANG? OR MODIF?)
S10	0	S3 AND S4:S5 AND S8 AND S9
S11	0	S6:S7 AND (INDEPEND?(2W)SCALAB? OR S9) AND (FAILOVER? OR F- AIL()OVER?)
S12	0	S6:S7 AND S3 AND S4:S5 AND S8 AND S9
S13	823	S6:S7 AND S3 AND S9
S14	5	S13 AND S4:S5
S15	17890	S6:S7 AND (INDEPEND?(2W)SCALAB? OR S9)
S16	21	S15 AND S8
S17	1	S16 AND S3
S18	0	S16 AND S4:S5
S19	21	S16:S17
S20	9	S19 NOT (PY>2000 OR PY=2001:2007)
S21	6	RD (unique items)
File	2:INSPEC 1898-2007/Sep W1	(c) 2007 Institution of Electrical Engineers
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